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Marine Corps Gazette

SEPTEMBER 1955
NUMBER 9
VOLUME 39

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COVER



Although the Geneva Conference is now history, the defense of the Free World is still the paramount issue. Associated with this, there are other problems which face us—the external threat of the rise of Russian sea power as one of the dominant factors in the alignment of world strength and, likewise, one of the greatest enigmas facing us internally—the allegiance of captured military personnel. These problems, which are of equal importance, are all covered in this issue of the GAZETTE by qualified experts. The cover was composed to this theme by 2dLt Roger Ferriter.

PUBLISHED BY THE MARINE CORPS ASSOCIATION

Membership in the Association is open to all active members and honorably discharged members of the Armed Forces of the U.S. Dues in the Association are \$3.00 per year and members receive the journal of the Association, THE MARINE CORPS GAZETTE, monthly. THE MARINE CORPS GAZETTE, copyright 1955 by the Marine Corps Association, Marine Corps Schools, Quantico, Va. is entered as second class mail, privileges authorized at Quantico, Va., and Baltimore, Md. Editorial, Business offices: Marine Corps Schools, Quantico, Va. Editorial telephone—4780; Business and Bookshop—5750. Subscription rate, \$3.00 per year; single copy 30 cents. Articles, photographs, book reviews and letters of professional interest are invited. If accepted, these are paid for at prevailing space rates. Material may not be reproduced without permission. Picture credits: all pictures official Department of Defense photos unless otherwise credited.

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message center

Reserve Unit Training

. . . Colonel Booth's article on the Marine Corps Reserve in your July issue excellently develops the training problem of Reserve structure. There is no question that the Organized Reserve can train a good basic Marine, in any operational OF, within one or two years. Any of the Privates and PFCs that we (the 3d Sig Co) have recruited directly from civilian life and trained for one or two years, would be an asset to an FMF communications unit.

The difficulty lies with the veteran Marine. Any such Marine Reservist in this area who desires to belong to an Organized unit must join a Signal Company. Needless to say our NCOs are of many diverse MOSs and very few are communicators. Consequently these NCOs, who occupy leadership and command billets commensurate with their rank, are required to learn operational communications. Meanwhile they are not training in their original OF.

If the Marine Corps computes the number of operational communications personnel by the size of the Signal Companies, their figures are inaccurate. If such computation is by actual MOS, the figures are right, but the proficiency of such men is not high. In any case there is no method that can truly evaluate the proficiency of the Reserve on an individual basis, nor is there any sure way to determine the number of MOSs available and ready for mobilization.

Colonel Booth's composite unit is the obvious solution. Battalions with a number of functional units will provide a means for training the majority of veterans in their proper OF. Recruits can be assigned to the functional units on the basis of need and aptitude.

CAPT F. D. SINGER

Rochester, NY.

. . . Colonel Booth has overlooked an important consideration regarding the integrated unit versus school-type training unit concept. First, let us clarify one point. The Marine Corps Reserve now trains men as individuals, as far as their mobilization liability and status is concerned. The present integrated unit is the vehicle we use for training. It is possible under a partial mobilization, that only certain Ready Reservists by rank and MOS would be called from an organized unit. The unit itself would

remain intact, training the remainder of its strength.

Now then, the factor Col Booth has neglected is leadership training. There is little or no room in the school-type system for juniors officers and NCOs to develop their leadership capabilities. A school-type system eventually breaks down to instructor-students. In the technical fields the instructor will probably, of necessity, be a member of the I&I Staff. Where, in this system, does the corporal look after his team; the lieutenant his platoon? There is no opportunity to really practice the placing of responsibility on junior leaders' shoulders. There are no tasks for young NCOs to perform that test their initiative. There is no real organization for command, only organization for training.

Granted, it is difficult to progress very far in 96 hours, plus annual field training. Even so, I believe a small amount of progress, plus the spirit of teamwork (and team training), makes the integrated unit worth keeping.

My observations are based on my current tour as I&I of the 1st Sig Co, USMCR, and an examination of the Naval Reserve Training Program conducted along the school-type concept.

CAPT R. A. FOYLE

Worcester, Mass.

Let 'em Be Marines!

. . . In the July issue MSgt Andrew C. Schipke touched on a sore spot.

On recruiting duty at Sub-Station, Newark, New Jersey, and maintaining an Itinerant Recruiting Duty office in my home-town post office, I have had too many recruits enlisted by me stop in on visits and express disappointment with their duty stations *after* boot camp.

Feeling quite proud of themselves for having accepted and beaten the challenge of boot camp—which none admitted to be as tough as feared—they did voice bitterly their assignment to security and guard posts. Almost to a man they had looked forward to being mud Marines in the field with the FMF.

Without standing the Corps on its beam, could not a policy be adapted where a recruit leaves boot camp and pulls a tour of duty—possibly 12 months—in an FMF unit? Then, if the man applies, a change of duty with some garrison detachment might sit better

with him, and be more appreciated, resulting in a better Marine on that post's main gate.

SGT LOUIS R. PESCATORE
East Orange, NJ

Self Discipline

. . . In regard to the letter, *Don't*, by 2dLt Lowe (July issue), I for one agree with him 100 per cent when he mentions the habits of many staff NCOs and officers—hands in pockets; keys dangling from belt; cuffs of utilities rolled etc. There are entirely too many of us in the Corps today violating these regulations. One such violation I would like to add to the list for a beneficial reminder is the *tie clasp*. Too many of the men are wearing the tie clasp incorrectly—in fact I've seen men wearing it right on the tip of the field scarf. Gentlemen, first as Marines, and second as Staff NCOs and officers, *we must* crack down on ourselves and the men committing such violations. Remember, just wearing the uniform of a Marine is not enough—we must wear it sharp and show our other Armed Forces and the public that we not only fight like Marines, but we also look like the Marines that we are.

MSGT JOHN A. BURKE
Camp Pendleton, Calif.

Unfix

. . . Having let it pass until after a hasty perusal of the July issue, and having found no correction, I must gig the author of the review of John W. Thomason's *Fix Bayonets* in the June issue.

The reviewer, Col Prickett, attributes a biography of Sheridan to the author. It never happened! The reviewer has got his cavalry generals, not to say the Blue and the Gray confused. Colonel Thomason did write a very fine biography of Jeb Stuart.

COL R. H. WILLIAMS
MB, Washington, DC

. . . As a lifelong enthusiast for the works of John Thomason, let me correct the statement in your otherwise outstanding review of the new edition of *Fix Bayonets!* Thomason never wrote a biography of Sheridan! This is an obvious slip of memory, for his *Jeb Stuart* is one of the best Civil War biographies of our times.

And many congratulations to the Marine Corps Association for getting behind a reissue of such a Marine classic as *Fix Bayonets!* I hope this foreshadows a time of greater activity by the Association as such, so that it may again become the focus of professional thinking and self-improvement which Russell and Lejeune meant it to be.

LTCOL R. D. HEINL, JR.
North Devon, England



NAVY GETS DEVICE TO PINPOINT LANDINGS

Landing Craft to Have Means of Precise Navigation

THE STORY BEHIND THE STORY:

The real news in the above headline warrants explanation—unless you've ever taken part in a beachhead assault with fog, darkness or smokescreen blotting out every trace of visibility.

■ Imagine yourself in command of a landing craft—one of dozens making an attack run on a hostile beach. You must stay on your own exact course or you'll run down—or be run down by—your sister ships. Or, worse yet, you may miss your designated spot on the beach, causing confusion and possible disaster to the operation. It's a neat trick under any con-

dition! And until now, it had to be done entirely on directions from an unreliable magnetic compass.

- How do you determine and hold an absolute course at sea? There is only one trustworthy way and that's with a Gyro-Compass—unaffected by magnetic disturbances. And, since 1911, such Gyro-Compasses developed by Sperry have guided the greatest ships of the seas. But where on a 36-foot landing craft would you put a Sperry Gyro-Compass standing 4 feet high, and weighing 900 pounds?
- Working with the Navy's Bureau of Ships' engineers, Sperry solved the problem by developing an entirely new Gyro-

Compass, especially for the purpose. It weighs 9 pounds instead of 900—is just 9 inches in diameter—and costs but a fraction of the amount of the larger compasses. And all without sacrificing Sperry precision. Development of this new Mark 22 Gyro-Compass is typical of many ways Sperry aids the military in their search for greater effectiveness, greater economy.

■ It's typical, too, of Sperry's developments that aid commerce and industry. For when the Navy's immediate needs are met, Sperry's Marine Division will make this new compass available to commercial shipping—putting Sperry precision navigation within reach of even the smallest ships.

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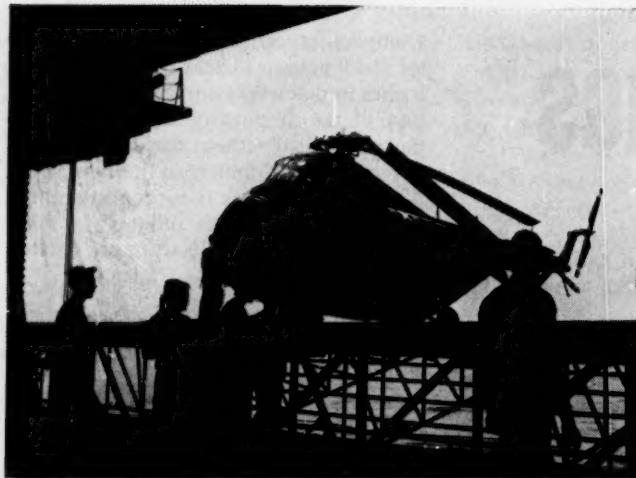
DIVISION OF SPERRY RAND CORPORATION



OFFSHORE HELICOPTERS—Humble Oil Company's drilling projects in the Gulf of Mexico are being served by three new Sikorsky Aircraft S-55 helicopters. For over-water operations, the helicopters are equipped with special

flotation gear. Dependable Sikorsky S-55s, which avoid the hazards of surface transportation, have proved to be highly successful carrying drilling crews, special personnel and equipment between the mainland and offshore rigs.

AROUND THE WORLD WITH SIKORSKY HELICOPTERS



SONAR DUNKER—Versatility of Sikorsky helicopters is again being demonstrated in the Atlantic, where Navy HO4S helicopters now perform anti-submarine missions. By dunking or trailing special sonar gear, the HO4S is prepared to make a major contribution to the job of finding and killing enemy submarines. This HO4S, with rotor blades folded, is pictured aboard the USS Leyte.



COPTERS FOR CANADA—Sikorsky HO4S helicopters are now serving with the Royal Canadian Navy. The first aircraft of an additional order of ten is pictured here during brief delivery ceremonies. Sikorsky helicopters, both military and commercial, are widely used in Canada. The dependable transportation they provide in a wide variety of jobs is especially important in Canada's wilderness areas.



HELICOPTER HISTORY:



FIRST ARMY FLIGHT OF THE VS-300

In July, 1940, the first Army pilot flew a Sikorsky helicopter. He was Capt. H. F. Gregory (now Brig. General), pictured here in the experimental VS-300.

This historic aircraft, America's first truly successful helicopter, led to the manufacture of Sikorsky R-4s, with which the Army Air Corps pioneered helicopter operations during World War II.

H-34s AT WORK—New Sikorsky H-34 transport helicopters are now on the job at Army aviation centers. Here a group of 12 combat-equipped soldiers at Camp Rucker, Alabama, trains with one of the big helicopters, which are larger and more powerful than the widely-used Sikorsky H-19s. The new helicopters are also built as the Navy's anti-submarine HSS and will also be available as a 12-passenger commercial S-58.



SIKORSKY AIRCRAFT

BRIDGEPORT, CONNECTICUT

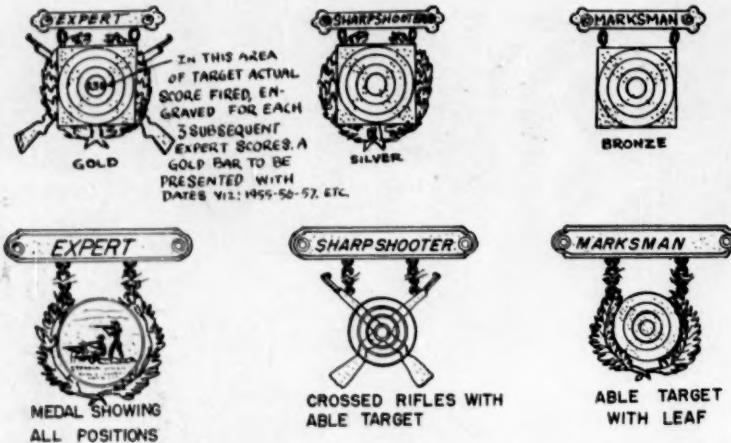
One of the Divisions of United Aircraft Corporation

Badge of Honor

. . . In continuance of LtCol McClanahan's excellent letter in the June issue, *Wear It Proudly*, why not go one more step and *Give It Meaning*. Not too many years ago there was meaning to being an expert with the rifle—not only prestige for the wearer, but a small bulge in the wallet—5 bucks. Now, the money has been taken away and the medal itself is worth half a buck or less. Certainly we can't or won't go back to money for outstanding shooting ability, but as with our team shots, there is meaning to the medal received for the work performed. If we redesign and use something better than base metal to distinguish our shooters, those striving for perfection will be more inclined, as LtCol McClanahan says, to "Wear It Proudly."

Here is one idea. (See below.)

CAPT THOMAS L. CURTIS
Quantico, Va.



. . . I happened to catch sight of LtCol McClanahan's letter on the present qualification badge. I'd like to take up where he left off. (See above.)

I've taken the liberty to put my ideas on paper, and they are being sent to you for comment. The present badges are fine but, if there's going to be any changes, I'd like to contribute.

CPL BENJAMIN GASTON
San Francisco, Calif.

Hear, Hear!

. . . I do not agree with LtCol McClanahan's suggestions for either redesigning or abolishing the present Marksman's Badge. It is my opinion that the present Badge should be retained. If Marksman detest wearing it, it is possible that they will take advantage of the best range facilities and instruction in the world and qualify as Experts. I have yet to hear the design of the Expert Badge criticized.

CAPT JOHN G. WORD
Camp Pendleton, Calif.

Your Other Left

. . . In the July issue of this year there was a short article and illustrated by Maj J. H. Magruder, III. It was a very fine article as well as informative, but the illustration is in error. The guidon bearer seems to be in position well enough with the exception that he is on the wrong side of the officer illustrated.

The LPM states that *when the company is on line*, as I believe was meant in this instance, the guidon bearer will be *one pace to the rear and 3 paces to the left of the company commander*.

I know there were Marines everywhere reaching for the LPM to check as soon as they saw the illustration. Could there have been a misprint?

SGT THOMAS A. ROBERTS, JR.
Mobile, Ala.

Eds No, that was the way it was posed for the artist at Mar Bks, Wash, DC.

armor to a round hitting at the horizontal.

Consideration must also be given to the fact that turret plating of some new heavy tanks is well in excess of 6 inches and, coupled with rounded and curved designs, presents a penetration problem to our 3.5 inch AT rounds of today.

In closing it might be of some interest to note, by means of double sloping the armor on a tank, it is possible to arrange a thickness of 4.7 inches of armor so that it requires an AT round with maximum fuze operation from the vertical to actually penetrate 10.7 inches before spalling will occur. In addition, there must be sufficient residual energy in the round to accomplish destruction of the tank.

CAPT CHARLES B. HASLAM
MCEB, Quantico, Va.

Seat Open

. . . Your usually capable editing fell apart in the article *Format* appearing on page 32 in the July GAZETTE. Below I have placed the first two paragraphs as printed, alongside a simplified version.

GAZETTE

In an effort to simplify and clarify the process of issuing field orders, the Marine Corps approved the new operation order. The present format is generally a modification of the old form with the additions and deletions designed to make the commander's desires more clear.

This article discusses the new operations order format, emphasizing significant changes and deletions, for readers who do not have ready access to revised manuals. (69 words.)

SIMPLIFIED

To simplify the issuing of field orders, the Marine Corps approved the new operation order. The format is a modification of the old form with changes designed to make the commander's desires clearer. This article discusses the new format, emphasizing significant changes for readers who do not have access to revised manuals. (52 words.)

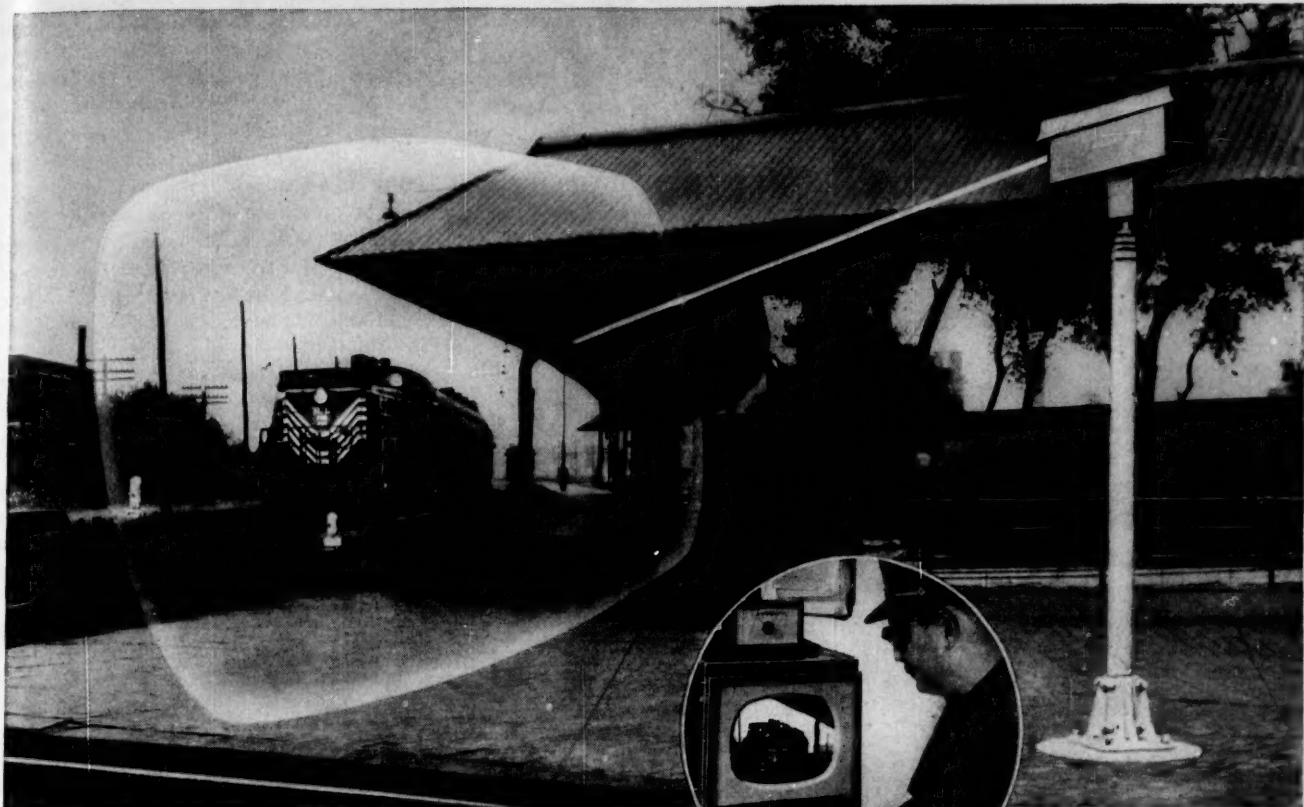
MAJ MERRILL F. McLANE
Silver Spring, Md.

Anyone Here Seen Kelley?

. . . Hail to Capt P. X. Kelley for his July Message Center letter in connection with Col Henderson's *Gruntled*.

How many hundreds of other officers took the same *peek*, checking in the lineal list, but only Capt Kelley goes on record. The Grand Order of Something or Other to Capt Kelley. There is a brave man, indeed.

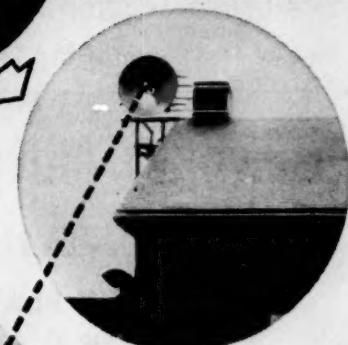
TSGT JAMES K. ROGERS
Camp Lejeune, NC



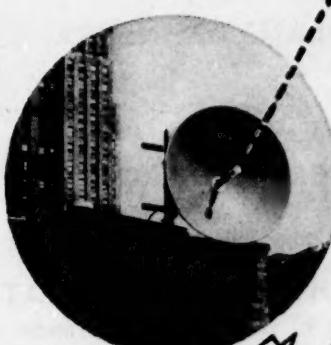
I. A weather-proof, rotating Farnsworth TV camera, mounted on the platform of the Rock Island's busy Englewood station, scans the main-line crossing.



2. The visual information is fed by cable to a TV monitor at the station.



3. Simultaneously, the picture is transmitted by Federal microwave from an antenna on the station roof.



4. A similar antenna receives the picture at the LaSalle Street Union Station and feeds it to another monitor there.



5. Thus, six miles away, Rock Island executives can see the actual loading and unloading of passengers, baggage, and mail, as well as other railroad operations.

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See Page 6, FM 21-26

. . . In the short time I have been in the Marine Corps, I have had very limited experience with mapping and compass used by the Marine Corps. However, I have learned, as many other Marines have, that a fraction of a fraction of an inch on a map can make a lot of difference in a calculation. I am familiar with the most common methods used by Marines to measure distance of roads, and I believe that they are fine methods; however, not as accurate as could be.

Recently I read an ad in a popular magazine, concerning a pencil that is used by architects and other professionals that must measure all types of surfaces. This pencil can be rolled along curved or straight lines and measures in inches or fractions thereof. I believe this would be a handy thing for a squad leader along with his mapping kit, for accurate calculation that might make a lot of difference where lives are concerned in combat.

SGT A. CASTANEDA

Des Moines, Iowa

Ed: For many years this item, a Map Measurer, has been a part of the field mapping kit in battalion headquarters.

More Pride Yet

. . . Being a commissioned officer in the US Marine Corps is something that every officer is duly proud of, but a great deal prouder are the officers that can claim former enlisted service.

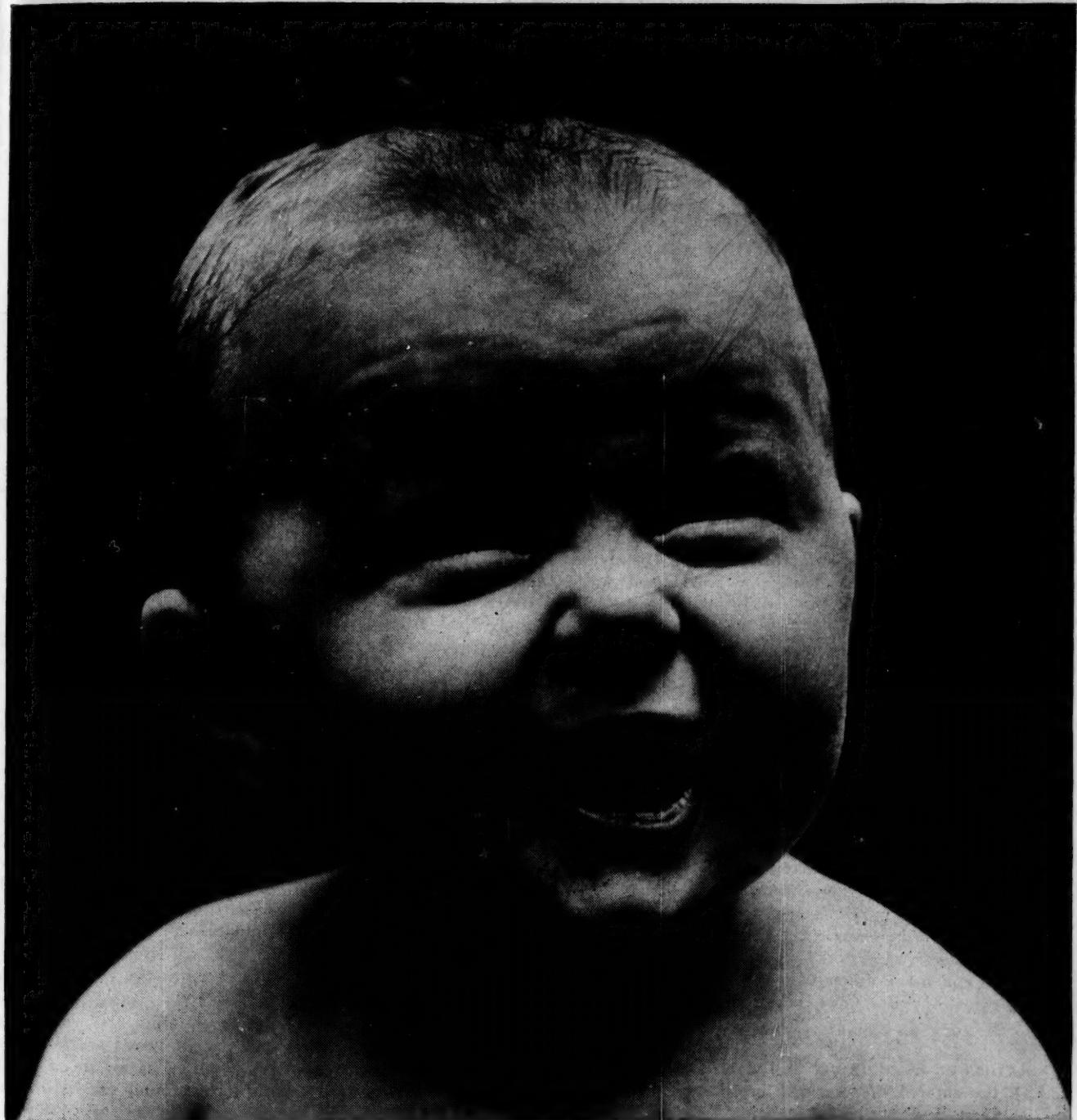
Unfortunately a great many officers with previous enlisted service were not enlisted for a sufficient length of time to warrant the Good Conduct Medal. I say unfortunately because these officers have nothing to show for their former enlisted service.

I do not propose to issue to each officer with previous enlisted service a GCM, for this medal is *earned* and should remain as the symbol it is.

However, why not issue some distinguishing device such as an additional distinctive ribbon, for officer personnel who have served as enlisted personnel with a regular component of the Corps? By regular enlisted service I mean personnel who have served for a period of at least 12 to 18 months. This period of service would indicate personnel that had actually enlisted to serve in the ranks and not just for the purpose of obtaining a commission.

By the same token, there should be issued some distinguishing device, or ribbon, to be worn by enlisted personnel who have been temporarily commissioned during a national emergency for a period of at least one year, and who have now reverted to their enlisted rank.

1STLT J. H. OLDS
Navy #128, San Francisco, Calif.



"YOU'RE TELLING ME!"

"That's a funny one. You telling me what a great thing the telephone is. As if I didn't know!

"Why, I'm one of the main reasons we have telephones in our house. For you can bet your life I keep the folks pretty busy around here.

"Just think! If we didn't have a telephone, Grandma couldn't call up to ask if I had a tooth. And Daddy couldn't talk to us when he's out of town. We couldn't order things in a hurry from

the stores. And Mother would be tied down just something awful.

"And suppose one of us suddenly took sick? Or there was a fire? Or a robber, maybe? Well, I don't worry about those things when I see the telephone.

"Doesn't cost much either," my Daddy says. And Mother says, "I don't know what I'd do without it."

BELL TELEPHONE SYSTEM



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introducing

SUCH NAMES AS B. H. LIDDELL Hart, Col J. C. Murray, Col J. D. Hittle, LtCol R. D. Heinl, Jr. and Maj R. Hargreaves (British Service) are familiar to the readers of the GAZETTE. The renowned British analyst **B. H. Liddell Hart, whose writings have aroused the keen interest of professional officers throughout the world for over 30 years, of course needs no introduction to military readers. His *Defense of the Free World*, published for the first time in the US by the GAZETTE, will be found on page 36. **Colonel Murray's Anti-Bandit War**, which ran in 1954 was a comprehensive study of guerrilla warfare in Greece. In this issue the Colonel concludes *The Prisoner Issue*. **Colonel Hittle** has been writing for the GAZETTE since he was first commissioned in the Marine Corps. His current article, *The Rise of Russian Sea Power* (concluded on page 12) brought out many new and interesting facts about Russia's naval traditions. *The Case Against The Cloth Belt*, and many other articles in the same vein came from the pen of **LtCol R. D. Heinl Jr.**, who has also been writing for the GAZETTE since he was first commissioned in the Marine Corps. This month he contributed, *Sensible Summer Uniforms* (page 46). Another author from Great Britain, **Maj R. Hargreaves** (Ret), has contributed *The Olympians, The Lonely Art* (1954) and many others. On page 58 he presents *Spy Out the Land*.**

AUTHOR OF Ideas! (PAGE 52), **LtCol R. P. Keller** entered the Marine Corps in 1940 and received his commission through the aviation cadet program in 1941. After receiving his wings he was assigned as an Instrument Flying Instructor at Pensacola. During WWII he commanded a fighter squadron in the Northern Solomons, thereafter, in North China. Prior to taking over a carrier based fighter squadron in Korea, the Colonel graduated from the Air Command and Staff School of the Air University. He wears the Silver Star, the Distinguished Flying Cross, Air Medal, Purple Heart and the Chinese



LTCOL KELLER

Order of the Cloud and Banner. He is currently Head, operational Planning Section, Plans and Readiness Branch, Division of Aviation, HQMC.

Capt W. J. Davis ISSUES A CHALLENGE to all Marines with his article *Don't Kill 'Em With Kindness* (page 64). He attended Bloomsburg (Pa) State Teachers School as a member of the V-12 and when the program terminated transferred to Penn State. He entered Basic School in 1947 through the NROTC program, went to Korea with the Brigade and served at HQMC and the Basic School before going to Junior School this month.

Nightmare, ON PAGE 20, IS co-authored by LtCols J. A. Crown and W. R. Bennett. Assistant City Editor of the Atlanta (Ga) Journal until recalled to active duty in 1951, LtCol Crown is currently serving as commanding officer of the 1st Motor Transport Bn, 1st Mar Div. He entered the Marine Corps in 1941 and was commissioned in 1942. During WWII he served with the 1st MarDiv on the Canal, New Britain and Peleliu. After returning to the States he attended the Infantry School, Ft Benning, Ga. and instructed infantry tactics at Camp Lejeune until he was released to inactive duty (Oct 1945).



LTCOL CROWN



LTCOL BENNETT

After being recalled to active duty, LtCol Crown was assigned to the Historical Branch, Headquarters Marine Corps. In 1953 he integrated and attended the Senior Course at MCS, 1953-54. Ordered to Korea after completing the school he became assistant G-3 until assigned to his present duties.

LtCol W. R. Bennett was commissioned in 1942 through OCC and ordered to the 2d Tank Bn. After serving as a Platoon Leader on Tarawa, Saipan and Tinian he returned to the US as an instructor at Jacques Farm. After the war he served with the Marine Detachment, USS Iowa, 1st Tk Bn (Camp Pendleton), OinC Tank, Amtrac, and Motor Transport Section, T&E Unit, MCS. Prior to going to Korea in 1954 he was ExO and CO 2d Tk Bn. In Korea he was assistant director "Exercise Nightmare." He is presently serving as CO, 1st Tank Battalion.

First Lieutenant Carlton J. Spring, Jr, author of Mortar - Howitzer?

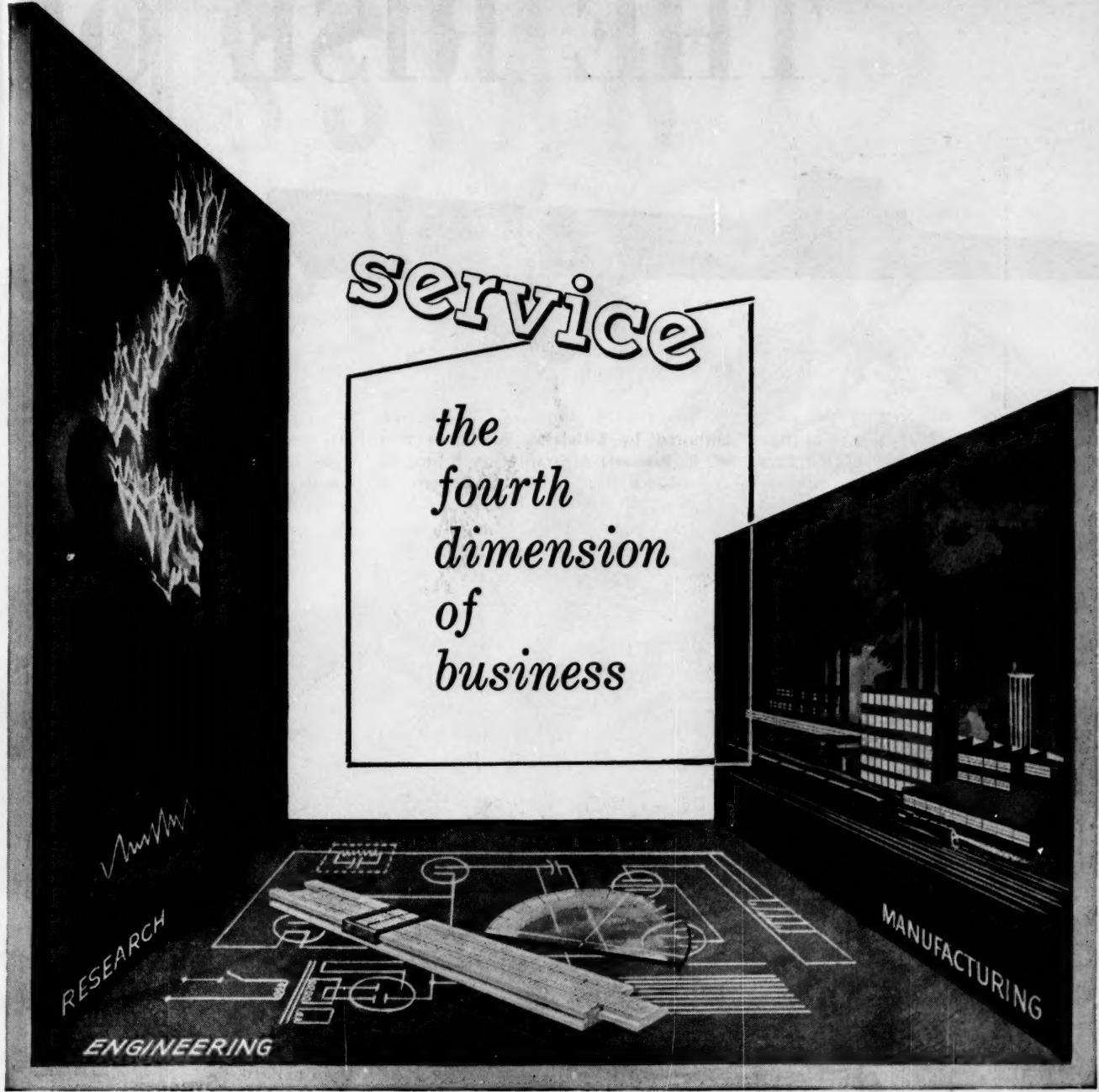
(page 55) was commissioned in the Marine Corps via the NROTC program in 1952 and he has been with Arty since that time. After receiving his commission he attended the Basic Artillery Course, Ft Sill and was appointed an instructor upon graduation. In 1954 he joined the 11th Marines as assistant S-3. A graduate of the university of Texas, he is currently serving with the 2d Bn 12th Marines. His reasons for writing this article, "I have been doing the background research comparing capabilities of the 105mm howitzer, 75mm pack howitzer and the 4.2-inch mortar, for the Marine Arty Conference."

LtCol F. A. Long RETURNS TO THE GAZETTE pages with, Mobile Loading in the Assault Phase. (page 24) He completed Basic School in 1941 and served in the Pacific until 1944, mostly with the 3d MarDiv. Colonel Long was an instructor, Command and Staff Logistics Section at Quantico from 1944-46 and Division Embarkation Officer, 1st Mar Div in China (1946-47). Since then, he has served as Logistics Officer in various units and more recently as Officer in Charge of both the Embarkation School (1950-51) and Logistics School, TTUPac (1951-52). In Korea he was assistant G-4 and later a battalion CO, he returned to the US in 1953 and was assigned duty as Logistics Co-ordinator, MCEC, MCS, Quantico, where he is currently serving.

LtCol C. H. Brush, Jr, WROTE HIS article AT Requirements-Helicopters (page 42), because: "If we are to build an assault force around the helicopter lift, we must give consideration to antitank defense of the force." Colonel Brush was commissioned in 1939 through the Organized Reserves and ordered to active duty when the Reserves were called out in 1940. In the Pacific with the 1st MarDiv during WWII he served as a company officer, company commander and battalion ExO. Prior to his release to inactive duty he served as tactics instructor TBS (Basic School) in 1945. The Colonel returned to active duty in 1947 and served as: Legal Officer, Parry Island; ExO, 1st Marines; G-4, FMF, Guam; assistant G-3, 1st MarDiv; S-3, 5th Marines and attended Command and General Staff Course, Ft Leavenworth. From 1952 to 1955 he was stationed at MCS, Quantico. He is presently at Norfolk, Va.



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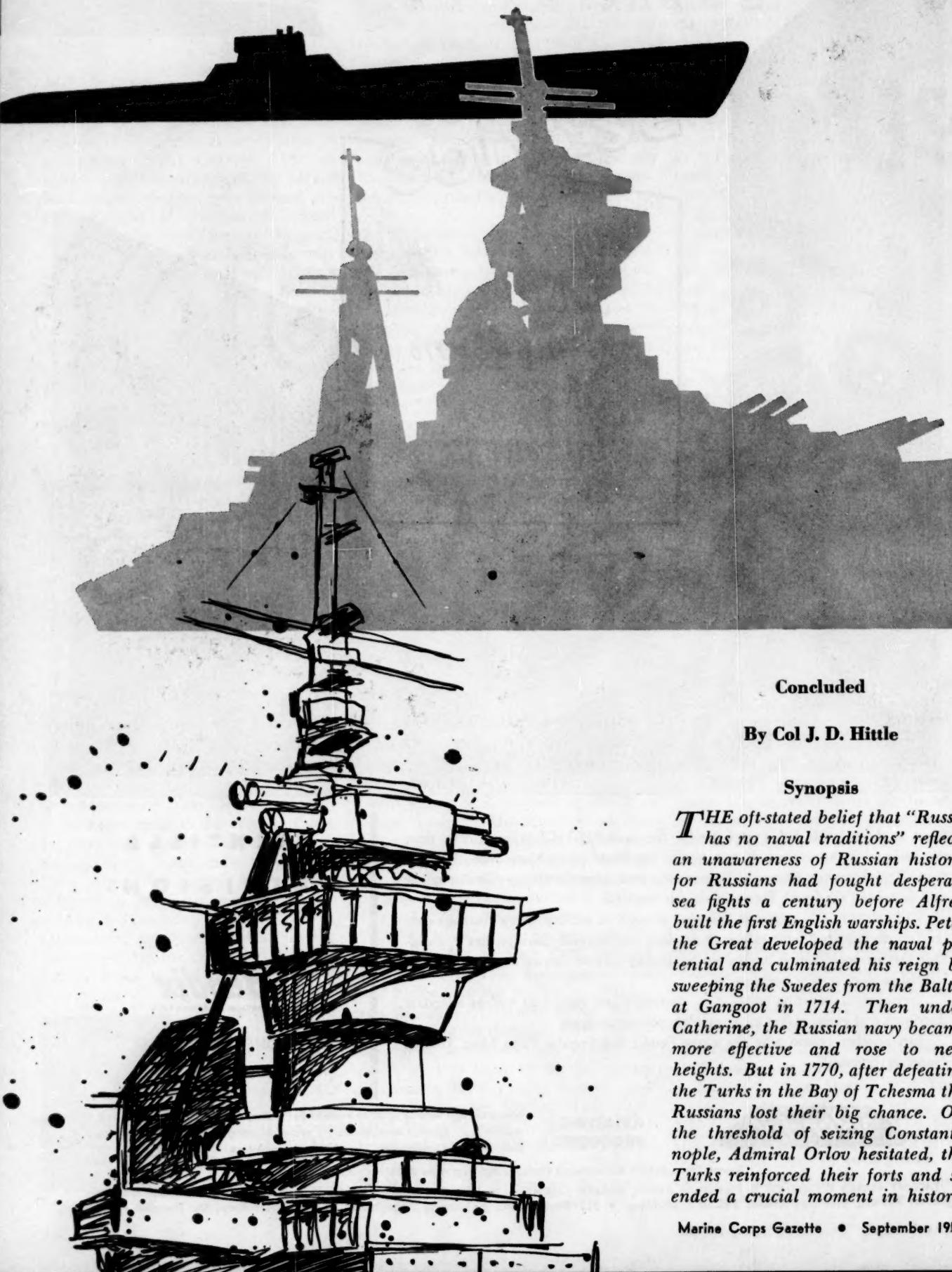
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THE RISE OF



Concluded

By Col J. D. Hittle

Synopsis

THE oft-stated belief that "Russia has no naval traditions" reflects an unawareness of Russian history, for Russians had fought desperate sea fights a century before Alfred built the first English warships. Peter the Great developed the naval potential and culminated his reign by sweeping the Swedes from the Baltic at Gangoot in 1714. Then under Catherine, the Russian navy became more effective and rose to new heights. But in 1770, after defeating the Turks in the Bay of Tchesma the Russians lost their big chance. On the threshold of seizing Constantinople, Admiral Orlov hesitated, the Turks reinforced their forts and so ended a crucial moment in history.

RUSSIAN SEA POWER



Heavy in cruiser strength, long on submarines, the new, powerful Russian Navy has two basic missions — to protect the strategic flank of the Red Army and to sever the enemy sea lanes

DURING THE NAPOLEONIC WARS, Russian sea power was employed extensively, but not decisively, and no major engagements were involved. However, this period, from the standpoint of Russian naval history was noteworthy in two respects. Probably the most important was the arrival again of a Russian fleet in the Mediterranean, where it co-operated, during the Russian alliance with England, with the British naval forces. Of perhaps lesser strategic importance, but of significant interest, was Nelson's attitude toward the Russian fleet. Nelson advised against acceptance of Russian naval assistance. He based his views on the suspicion, and it was a well justified one, that Russia would fully use the opportunity to press her anti-Turkish policy. Nelson,

understandably, preferred to have Turkey, rather than Russia, controlling the exit from the Black Sea to the Mediterranean.

Russia allowed herself only a relatively brief time to recover from the shock and attrition of the Napoleonic Wars. By 1827 she had turned her attention once again southward against the Turks. A joint French-English-Russian fleet, engaged and destroyed about two-thirds of the Turkish-Egyptian fleet at Navarino on 27 October 1827. British accounts of the battle give the Russians but minor credit for the victory. The Russian version is that the *Azov* sank the Turkish flagship, two frigates and a corvette. Again, an example of how battle history depends on who does the writing.

The year 1853 brought Russia

and Turkey into another war, and this war brought the Imperial Russian Navy its most decisive and dramatic victory — the battle of Sinop, 30 November 1854. Not only was Sinop a contribution to Russian naval tradition, but it also made an important contribution to naval warfare. There, for the first time, shell were used in ship to ship warfare. With this new weapon the Russians, under Adm Nachimov, flying his flag in the *Tri Sviatitelia* (120 guns), made short work of the reconstructed Turkish fleet. An account of the battle relates that in 5 minutes the Turkish fleet was afire. With the exception of one steamer that escaped, every major Turkish ship was destroyed.

Sinop was notable in another respect. It marked a high point of

Russian command efficiency, as Nachimov planned carefully to obtain full effect of the shell projectiles. Significantly, Jane, the English naval historian, describes Sinop as "really a brilliantly conceived and executed surprise."

Also, Sinop made a notable contribution to not only the tradition of the Imperial Navy, but to the Soviet Navy as well. Today, the *Admiral Nachimov* is one of the Soviet Union's powerful new *Sverdlov* class class of cruisers.

Russia's devastating use of shells at Sinop gave impetus to the idea of protecting ships with armor. France soon began construction of an ironclad, and England shortly followed. Sinop had its influence on American history, too, for the resulting emphasis on armor was reflected in the naval thinking that brought into being the *Monitor* and *Merrimac* of Civil War fame.

Russia may have destroyed the Turkish Navy at Sinop, but that demonstration of Russian sea power did not deter England and France from going to war against her in the Crimea a year later.

The causes of the Crimean War were both nebulous and numerous. In general, however, the underlying cause can be attributed to a desire — perhaps more intuitive than rational — to block Russian pressure being increasingly exerted against Turkey and the eastern Mediterranean region. As such, the Crimean War was a mid-19th Century war of containment against Russian aggression.

The Russian Navy won no laurels in the Crimean War, principally because the Navy kept to its ports. Why the Navy didn't fight warrants note. According to Jane's explanation, Russian naval inaction was fortunate for the Allies, but costly to the Russians, who thus forfeited a good chance, in September of 1854, to destroy, or badly maul, an allied force in the Black Sea.

Kornilov, the Russian admiral at Sevastopol made preparations to sail out and engage the approaching fleet. However, Gen Menschikov, in supreme command, was thinking in terms of land warfare and he countermanded the admiral's plans. As a result, Kornilov, an able veteran of Sinop, was kept at anchor, and a crucial opportunity was



The Admiral Nakimov—no hesitation to recognize Imperial success

thrown away.

Within a few months most of Kornilov's ships were ingloriously sunk to block the harbor. Thus was Russian naval power in the Crimea immobilized, misused and wasted by land-power thinking. Nor was this to be the last of European examples of how a navy, when subordinated to a land-minded high command, can be destroyed just as surely as by enemy action. In this instance it might be observed that perhaps Russia overdid the idea that the navy is the sea arm of the army. Since the same theory applies in today's Soviet military thought, there is a continuing possibility that Soviet land-power thought may misuse Russian sea power. Such may well prove to be the Achilles' heel of Russia's rapidly growing navy.

In a practical sense, Russia had no effective navy at the end of the Crimean War. When she started rebuilding it was possible to concentrate on steam rather than sail. Again after the Crimean War, as on previous occasions in her history when Russia embarked on a navy-building program, she turned to England for assistance.

Like other sea powers, Russia was alert to naval implications of the American Civil War. Impressed by the *Monitor's* performance against the *Merrimac*, Russia began, in 1864, a program that produced 10 monitors for the fleet.

A few years later emphasis was placed on speed rather than protection, and construction of armored cruisers — which Russia is probably justified in claiming as her invention — was started.

One type the Russians will probably not lay any claim to, although they conceived and built her, was the circular ship *Popov*. On her trial cruise up the Dneiper she sailed well until, in turning, the current caught and whirled her out of control until she was swept out to sea with every member of the crew out of action from dizziness. That was the last of the round ships.

The 19th Century was not to end without another Turko-Russian War. This one, from 1877 to 1878, is of historical importance for during it the Russians made another contribution to naval warfare by conducting, in the Black Sea area, the first successful torpedo attack ever made. On the night of 25 May 1877, 4 boats, armed with spar torpedoes, attacked Turkish monitors, one of which was sunk. The foremost pioneer in Russian torpedo tactics was a hard working and able naval officer, Lt Makarov, who was destined later to demonstrate great professional attributes in the Russo-Japanese War.

The Turko-Russian War of 1877-1878 provided the last victories of the Imperial Navy, for the ebbing years of the 19th Century brought Russia and her navy ever closer to Port Arthur and the Straits of Tsushima. Although Russia went through the motions of maintaining her naval power by new construction, her navy, at the outbreak of the Russo-Japanese War (1904) was far from prepared to come to grips with the vigorous, well equipped Japanese Navy under Adm Togo.

Historians give many reasons for the sad state of the Russian Navy

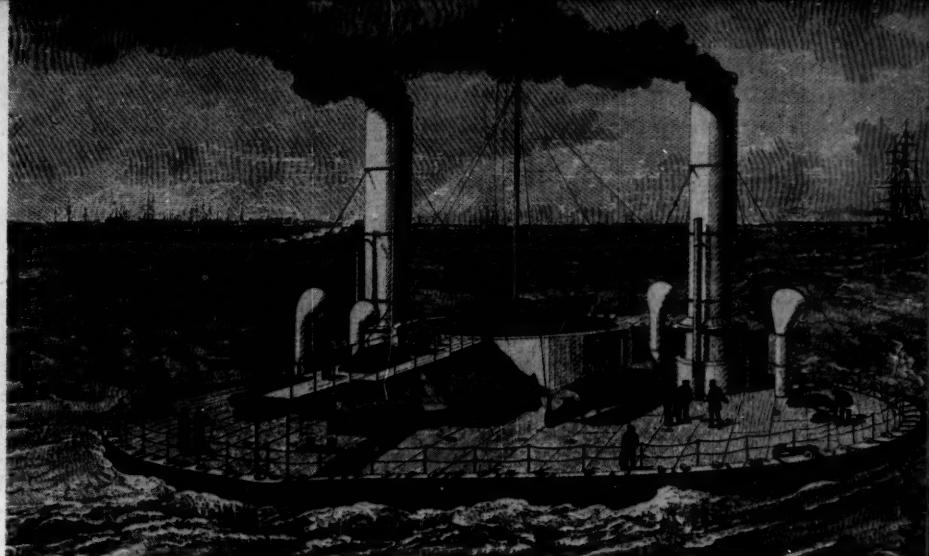
at the outbreak of hostilities. Not the least of these reasons is that the Navy lacked the top-level leadership to keep it spiritually and technically equal to the task of a major war.

The paradox was that the kind of enlightened leadership was available, but it was not used until too late. Through the latter years of the 19th Century, Russia possessed one of the great naval minds of the times. That individual was VAdm Stephen Makarov, the same Makarov, who as a lieutenant, in 1877, pioneered torpedo boat tactics in the Black Sea. Combining unusual theoretical and practical ability, Makarov not only contributed to naval warfare by his work with torpedoes, but he also, in subsequent years, wrote a text on naval strategy that was studied even by Togo. In addition, he was a noted hydrographer, and is credited with the design of the ice-breaker *Yermak* (launched in 1898, and still in service).

Typical of the abysmal ineptness that often characterized Russian administration, Makarov, at the outbreak of war with Japan, was on duty at the Kronstadt Navy Yard, while the ineffective Stark commanded the Port Arthur squadron. In the first month of the war Togo had dealt devastating blows against Russian sea power based at Port Arthur. In this moment of despair the Russian Admiralty remembered Makarov and ordered him to command of the Pacific Fleet.

From the moment of his arrival a new fighting spirit characterized the Russian naval forces. Morale went up and so did the willingness to engage Togo's blockading fleet. Sparked by Makarov's natural leadership, the ships at Port Arthur began to show a pride in appearance and combat fitness. There was increased activity as he demonstrated a judicious willingness to move out and accept combat. For the first time the Japanese were impressed by the spirit of the enemy. Togo himself became more cautious.

The last hope for Russian naval survival in the Pacific died on 13 April 1904, when Makarov, returning from a sortie, went down with the *Petropavlovsk* which hit a mine entering Port Arthur. A Japanese writer judged Makarov as "more valuable than the whole fleet at Port



The Popov—A "first" the Russians fail to claim

Bettmann

Arthur." The naval historian Edwin A. Falk, author of *Togo*, says of Makarov: "He was called upon too late to avert ultimate defeat. Had he been given command of a completely concentrated fleet a year or two before the war there might have been a different story." Today Makarov is recognized as a part of Russian naval tradition, for his name has been given to a Soviet cruiser.

With Makarov gone, there only remained Rozhdestvenski's battered and worn fleet struggling around the rim of Asia, all the way from the Baltic, headed for the Far East. But before the fleet lay the Straits of Tsushima. There Togo "crossed the T," and Imperial Russian sea power died under Japanese guns.

The Russian Navy never recovered from its Far Eastern disaster, and it played no significant role in WWI. The beginning of the Soviet regime commences the third period of Russian sea power.

By no stretch of the imagination is this current rise of Russian sea power a matter of mere academic

interest. It is loaded with strategic significance.

The simple fact that the Soviet Union is embarked on such a vigorous naval program presents, on analysis, valuable insight into the very fundamentals of Russian strategic thought. That it should do so is understandable, for a vast naval program, such as the Soviets are now engaged in, cannot be the result of momentary policy or strategic caprice. Rather, such a program, involving, as it does, a heavy demand on steel production and skilled manpower, certainly would not be undertaken except after prolonged consideration. In view of the fact that the specific requirements for the creating of naval power would strain heavy industry and skilled labor capabilities—sensitive features of the Soviet Union's economy—it is all the more logical to assume that the current Russian naval program is the result of deliberate analysis of Soviet requirements and is deemed to be indispensable to the achievement of Soviet strategic goals.

Tsushima—Togo crossed the "T"

Bettmann



Molotov, who through the years has probably been more closely involved with formulation of Soviet strategic policy than any of the living Soviet rulers, stated the need for Russian naval power in 1938. "The mighty Soviet power must have a navy, both on the sea and ocean, commensurate with its interests and worthy of our great cause."

From the historical standpoint it is worth noting the parallel between Communist Russia of 1938, when Molotov made his sea power pronouncement, and Imperial Russia of 1710, when Peter the Great was determined to make his nation powerful on the seas.

In 1938 the Soviet Union did not control the Baltic States and Russian sea power was of little consequence. In 1710 Peter's conquest of the Baltic littoral was still in the future, and Russian naval power consisted largely of galley-type coastal vessels. The importance of this historical parallel is this: In both 1710 and 1938, Russia was committed to a strong Baltic policy. On each of these occasions Russia responded to such a policy by increased emphasis on sea power. Both eras were characterized by seizure of the Baltic States — Peter seizing them in the course of his Baltic campaign, and Communist Russia regaining them through WWII. Each acquisition was accompanied by the rise of Russian sea power. This time, however, Russia's domination of the Baltic is being given further meaning by continued naval growth. It is not being dissipated by default as happened in the years immediately following the death of Peter. Again, another example of not only how closely the objectives of the Soviet Union coincide with those of the old regime but also the similarity in the means of achieving them.

With respect to the Baltic, there can be no doubt but what the current and rapid upsurge in Russian naval strength means that the Soviet Union is determined to tighten even further her grip on that critically important inland sea. Such a policy is basic to Russian defensive and offensive strategy.

From the standpoint of Russian defensive strategy, control of the Baltic is necessary to prevent an enemy from using it as an invasion route by which it would be possible

to strike at the Russian homeland without paying the heavy price of overrunning the Russian army's vast defenses in depth that would confront an attack from Europe.

Russian sea control of the Baltic could be of perhaps decisive importance in a war between the USSR and the NATO Powers. The North European Plain is still an area of decision in European warfare. Whatever side controlled the Baltic Sea flank of that plain would possess a significant combatant advantage. Such control of the sea flank would permit Russia to secure her north (right) flank in offensive or withdrawal, and at the same time it would require the anti-Communist forces, in turn, to divert attention to protect their sea flank against Russian threat from the north. In short, the Russians indicate that they are fully aware of the fact that sea control of the Baltic would constitute a vast strategic advantage in the conduct of land operations in Europe.

Parenthetically, it should be observed while the role of sea power is currently subjected to question and disparagement by elements within the NATO nations, Russia shows every evidence of realizing the inevitable and historic fact that not even land operations in Europe can be divorced from the sea.

Russian Baltic domination has a profound influence on international affairs in northwestern Europe. As long as the Soviet Union maintains naval supremacy in the Baltic the liberation of the Baltic states of Estonia, Latvia and Lithuania will be an aspiration but not a realization. Peter the Great realized how vulnerable those regions were to sea power and his vigorous sea power policy was a reflection of that realization. The two and a quarter centuries that have passed since Peter's seizure of the southern Baltic littoral have not negated the strategic fact that Russian domination of the Baltic Sea means Russian domination of the Baltic States.

With respect to the nations on the northern rim of the Baltic, Sweden and Finland, the Soviet Union's control of the Baltic drastically limits Swedish and Finnish freedom of diplomatic maneuver.

In the practical military sense, Finland and Sweden are not free agents. Regardless of what their

sympathies may be in the East-West struggle, the shadow of the Russian bear falls across their borders, and the claw of that bear is the Soviet Baltic fleet.

While in the strict geographical sense, Norway is not a Baltic nation, she is far from being immune to the sensitive position of her neighbors, Sweden and Finland, who are directly exposed to the Soviet Union's Baltic dominance.

In way of general summary, Russia's sea power primacy in the Baltic seems to be characterized by the following purposes and effects:

- a. Prevent an enemy from using the Baltic as a sea approach to northwestern Russia.
- b. Assist land operation of the Russian army in Europe by sea control of the northern flank of the North European Plain.

c. Assure continued domination of Estonia, Latvia and Lithuania on the southern littoral of the Baltic.

d. Pose a sufficiently grave threat against Finland and Sweden — and to a somewhat lesser degree to Norway — so as to impair, at least, their freedom in diplomacy and to neutralize, in large measure, their military position as nations ideologically oriented to the West.

It requires no strained analysis to recognize that these essential elements of current Soviet policy in the Baltic are essentially a modern corollary of the strategic thinking that gave impetus and meaning to the Baltic sea power policies of Peter and Catherine the Great.

To the south, in the Black Sea, Soviet sea power continues in its historic role: to deny the Black Sea to enemy navies and to assist Russian land forces in operations around its littoral. All of which, of course, is directly related to the historic Russian goal of seizure of Constantinople (Istanbul) and control of the Straits giving access to the Mediterranean world.

Yet, nowhere has the significance of Molotov's 1938 sea power pronouncement been accorded more significance than in the Far East. That such is the case is understandable for a strong and aggressive Far Eastern policy is a fundamental feature of Communism's struggle for world domination. Once Imperial Russia gained a foothold on the Western Pacific littoral, achievement of such



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Port Arthur — Togo didn't end the Russian naval threat in the Pacific

a goal being signaled by the founding of Vladivostok in 1860, Russia became a Pacific sea power nation. Whether she deserved such a role or not, she could not escape it. By pushing her eastern frontier to its geographical land limit she reached the Asian rim of the Pacific. Even in her twilight years, Imperial Russia made her determined bid as a contender in the Pacific arena.

The Imperial Russian fleet met its watery doom in the narrows of Tsushima, but Togo's guns did not end Russian naval competition in the Pacific. The time that has passed between Togo's victory and the post-WWII rise of Soviet Russian sea power has been but a brief interlude in the history of Pacific power politics. A Russian fleet of growing strength and importance today shows the hammer and sickle in the same Pacific waters where ships flying the Double Eagle sought to extend Russian influence in the 19th Century.

Red Russia, like her Imperial predecessor, realizes that sea power is an indispensable attribute of an aggressive Far Eastern policy. Geographically, Pacific Asia is a sea power theater, and historically the peoples of Asia's Pacific littoral have been conditioned to the decisive role of sea power in those areas. Today, as in the past, the vital areas of Eastern Asia are particularly vulnerable to sea power. Oriental awareness of this strategic fact makes sea power a potent weapon in "cold" as well as "hot" warfare. The rapidly growing Soviet Russian naval capability in the Western Pacific reflects the Kremlin's recognition of sea power's peculiarly important role in the struggle for the control

of the Orient.

In view of these factors, and the coincidence of the emergence of Communist China on the mainland, the rise of Russian sea power in the Pacific becomes even more significant. Each gives strength and meaning to the other. Russian sea power provides a potential shield for protecting Red China from the western sea power, which in event of war, would pose a mortal threat to the Chinese Communist regime. At the same time, Red China's vast Pacific littoral provides the bases so necessary for the gradual projection of Soviet Russian sea power southward toward Indonesia and Southeast Asia, both being regions peculiarly sensitive to sea power.

Russian use of Port Arthur and the recent press reports of a Soviet Russian fleet operating as far south as Tsingtao offer significant indications of the manner in which the existence of a Red China assists in the exploitation of the growing Russian naval strength in the Western Pacific. There can be no doubt but what Russian use of Red Chinese bases, if continued and expanded, poses one of the most serious threats to the security of the Western world. True, that threat has not at present fully materialized, but it has, however, already passed its formative stage and is shaping up at a speed which a mere few years ago would have been considered fanciful and practically impossible.

The implications of China-based Russian sea power are not pleasant to contemplate, particularly when it is remembered that the prime reason the United States went to war with Japan was to prevent an un-

friendly nation from controlling the Western Pacific and its Chinese littoral, precisely the areas involved in the growing Russian sea power in the Pacific.

Considered in its global aspects, the rise of Russian sea power presents profoundly serious implications. The very long range nature of her vast and continuing naval program casts some light on Soviet Russian thought as to the future development of the East-West conflict.

Increasing emphasis on sea power indicates that the Kremlin does not believe that all-out hydrogen warfare will come, or, if it does happen, the thermo-nuclear exchange will not be decisive. Furthermore, Soviet policy reflects a belief that even if such an exchange of mass destruction takes place, an East-West "hot" war would eventually settle into a war of attrition. In such warfare the Free World's survival and victory would depend on the victory of Western sea power.

It is the sea lanes that bind together the United States and the NATO and SEATO Nations. Unless those sea lanes are preserved, the anti-Communist nations in Europe and Asia will be isolated, cut off from the United States, the industrial base for the Free World. By the same token, Russian severance of the Free World's sea lanes would deprive the United States of the strategic raw materials so indispensable to our wartime requirements.

There may be some doubt in the Free World as to the importance of sea power in a war with Communism. However, there is no doubt in the Kremlin as to how important the maintenance of sea lanes are to the non-Communist world.

In fact, the very nature of the Soviet Navy provides potent evidence of Russian understanding of the non-Communistic world's utter and final dependence on global control of the sea lanes. Submarines and fast cruisers are the principal naval instruments used to destroy an enemy's shipping and sever her sea lanes. Submarines and cruisers are the foundation of the Russian fleet!

At this point it is appropriate to note the absence of aircraft carriers in the Soviet fleet. At first glance, such lack of carriers may seem a vital defect in the structure of Russian naval power, and in the test of



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Soviet torpedoes—greatest threat to extended sea lanes

war it might well be just that. However, absence of carriers is not deemed an oversight. Rather, the failure to conduct a carrier construction program as part of the fleet build-up should, it seems, be recognized as a deliberate decision by the Kremlin, and reflecting the strategic concepts that will govern the wartime employment of the Red Navy. The Red Navy has two major roles: destruction of enemy sea lanes and assisting the army's land effort.

Assistance of the Russian Army by operations on the sea flank has been a historic role of the Russian Navy. This is an interesting and perhaps not illogical naval mission for a nation such as Russia. Located on a central land mass, moving along or toward a sea or ocean, with her main effort based on land power, the navy could make its most direct and meaningful contribution by supporting the army. Such, in essence, was the main role under the Empire, and it is still a major role of the navy under the Soviets. Stalin stated it clearly when he said, "The Red Fleet is the true helper of the Red Army."

Fulfilling a mission of assisting the land effort by action on the sea flank does not require far-ranging high seas fleet operations. Actually what is involved is the employment of naval units in relatively close coastal waters protecting the sea flank from enemy attack and at the same time supporting the land action by naval operations.

Such fleet doctrine for operating relatively close to the coast permits the Russian fleet to operate under cover of land-based aircraft. It is this concept that minimizes, from the Russian standpoint, the need

for carriers at present.

It would indeed be wrong to assume that such a line of naval thinking also eliminates the need for naval aircraft. While Russian naval doctrine does not require carriers, it does recognize the special character of naval air requirements. As a result, Russian naval aircraft are estimated to total about 3,000.

Such employment of naval forces, supporting the land effort, and provided air cover by land-based naval aviation, appears peculiarly appropriate to the requirements of Russian aggression in the Baltic, the Black Sea and along the Western Pacific littoral.

With naval forces tailored to such a kind of warfare, it looks as if the Soviet Union is determined to continue the thus-far successful Communist drive southward around the Pacific rim of Asia. It would also indicate that joint Sino-Soviet plans call for continuing the largest scale flanking operation in history—the envelopment of Europe via the Eurasian littoral.

In cold war aggression by subversion, the presence of a Soviet fleet

in adjoining waters would have a powerful psychological effect on the natives of Southeast Asia who have, for centuries, been exposed to the decisive influence of sea power.

In actual war, should it come, the very type of strategy which permits Russian fleets to operate in-shore under land-based air and hence without carriers, would have the opposite result on anti-Communist naval forces. The latter, operating across large sea areas, beyond effective support of friendly land-based air, would, in order to move in and come to grips with the Communist fleet, require large fast carrier forces. So, too, would amphibious forces be required to seize and hold critical points of the Asian littoral. This is but another example of how necessary it is for the United States to pattern its naval forces on its own requirements, and not according to what other navies might have. In this case, the United States would have to have balanced naval forces of vast carrier—and amphibious—strength to combat the Russian Navy operating under a strategy not requiring carrier-based aircraft.

Such carrier air elements would be required to fight for and maintain air superiority, permitting other fleet units to operate against Communist sea forces in coastal waters. In such warfare amphibious forces would prove highly effective in seizing coastal naval bases and securing lodgements from which subsequent ground attacks could be directed against the seaward flank of Communist forces.

Although Russia shows indications of interest in amphibious operations, she has, as yet, not developed a major amphibious capability. Increasing Soviet interest in such

Land-based air concept—no carriers needed

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Amphibious capability — receiving increasing attention Sovfoto

operations is, however, understandable, for a high amphibious capability would be peculiarly appropriate to the kind of naval war Russia would probably wage along the shores of the Black and Baltic Seas, and on the Pacific rim of Asia.

Significantly, Soviet military writers have been devoting increasing attention to the subject of amphibious warfare. Particular emphasis has been placed on amphibious warfare articles by high-ranking officers, including Adm Isakov.

According to R. L. Garthoff, author of *Soviet Military Doctrine*, the mission of amphibious assault may be summarized as follows:

"A 'flank' attack in conjunction with a land offensive,

"Rear harassment and raids,
"Beachheads on hostile shore for a new front,

"Diversionary fronts and reconnaissance."

With the exception of the third mission — establishing a beachhead incident to creating a new front — the above amphibious missions could be assigned to relatively small forces, and would appear to be within present Soviet capabilities. It is extremely doubtful if large scale operations, such as the United States conducted in WWII, are presently feasible.

Rapid attainment of a major Soviet amphibious capability is hampered by lack of both adequate special shipping and experience in large scale landings. Russian amphibious operations in WWII were rarely in excess of regimental size. Such handicaps can, of course, be surmounted. But for the present, a major amphibious capability is not a ready weapon in their arsenal.

All of which tends to focus attention on the two basic missions of Soviet naval power: the protection

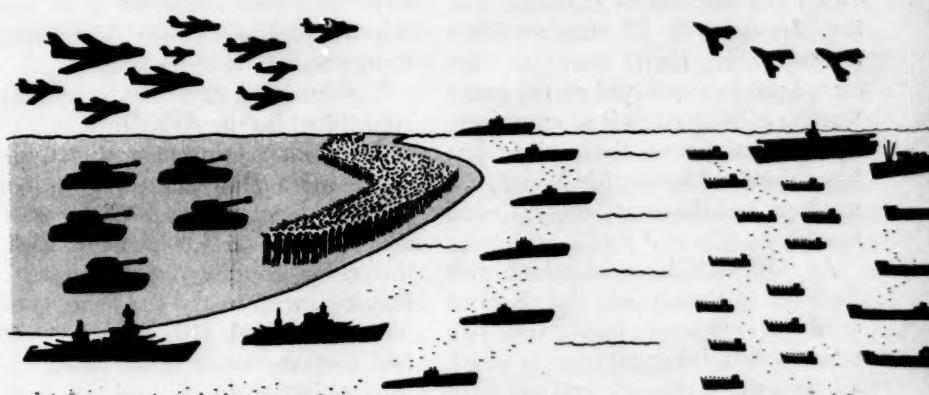
of the strategic flank of the Red Army, and the severance of enemy sea lanes.

In addition, the present — but narrowing — disparity in size of the United States and Red Navies, there is another respect in which the two are fundamentally different. The Russian Navy is specially designed for dual missions of attacking enemy sea lanes and protecting the army's sea flanks. Because the composition of the Red Navy is so carefully tailored to such operational requirements, the Russian naval power has not developed aircraft carriers, or

naval power possesses balanced fleets based on strong carrier and landing forces, and Russia lacks such elements, the balance of naval power should rest with the United States. It is in the final analysis, the balanced fleets that assure US naval superiority. It is, therefore axiomatic that the concept of the balanced fleet must be constantly and vigorously supported. Its continued acceptance and application is the assurance of continued supremacy of United States naval power.

In summary, the following seems pertinent:

- Russia has a meaningful naval history.
- The Soviet Union has numerically surpassed England as a sea power and in important ship categories is out-building the entire Western World.
- The Soviet Navy, with several times the number of submarines Germany possessed at the beginning of WWII possesses a grave threat to the sea lanes upon which the survival of the Free World depends.



Naval doctrines — support of land forces vs "balanced fleet"

amphibious landing forces such as the United States sea power possesses in the Marine Corps.

Lack of aircraft carriers and US Marine-type landing forces, although thus-far deliberate, places Russian sea power at a demonstrable disadvantage in relation to the United States, for it is aircraft carrier and Marine landing forces that constitute the indispensable features of our "balanced fleets," and it is these same aircraft and landing forces that impart such an unsurpassed strategic flexibility and mobility to our naval power. As long as the United States

- The heavy investment Russia is making in sea power reflects a Communist belief that either hydrogen warfare will not come, or will not be decisive.
- Communism, under Russian supervision is determined to continue the march toward the Mediterranean and Europe via the Western Pacific littoral.
- Viewed in its present meaning and its future potential, the rise of Russian sea power stands as the most significant development in the East-West struggle.

US MC

NIGHTMARE

Live firing problems, involving day-night operation with co-ordination of supporting weapons by the commander and his troops, should be required for every battalion in the Corps

• EARLY ONE MORNING IN 1954, grim-faced Marines of the 1st Mar Div looked out from their positions toward the enemy-held hills of Korea. They had been locked in combat during most of the night and were weary men. At a prearranged signal, artillery suddenly opened up, lobbing their shells into enemy country. These explosions were joined by the crack of rifles, the cough of mortars—4.2s, 81s and 60s—and the staccato of machine gun fire. In time the 75 mm recoilless rifles added their roar to the cacophony being played on the green Korean hills. And as if to emphasize the importance of the action, jets from the 1st Marine Air Wing flew in low to disgorge rockets and bombs.

As you may have surmised, this was no violation of the Korean armistice—but a reinforced battalion-size training exercise in which all weapons—organic and supporting—actually fired in co-ordination.

A military unit holding a defensive sector during an uncertain

armistice is faced with a dual mission. It must be constantly prepared for a sudden resumption of hostilities and it must maintain its combat readiness by never-ending training. These were the two missions which the 1st Mar Div faced after the Korean cease-fire in the summer of 1953. In implementing the training mission, the Division established a unique reinforced battalion-size problem in land warfare. The real estate set aside for this training was called Nightmare Range and it is aptly named.

Nightmare Range was originally established by the Army in Korea to combat test infantry battalions and was made available to the Marines for the same purpose. Some 6,000 meters long and 1,000 meters wide, the range contained 3 key terrain features within the combat area. These are Tank Hill and Hills 550 and 620, the latter constituting the final objective in the training exercise.

In order to properly train the Division's 9 infantry battalions on

the range, an Exercise Director Headquarters was established. The Director and his staff were given a month in which to prepare a suitable problem in land offensive combat for a reinforced Marine infantry battalion.

During that month a problem was evolved which included a night relief of the lines, a hasty defense, a night defense, a day attack and, of course, scouting and patrolling. The battalion would be reinforced by a platoon of 4.2 mortars, a platoon of tanks, a section of 75 mm recoilless rifles and a battery of light artillery. In addition, close air support would be provided by jet aircraft from the 1st MAW. Each battalion would spend 3 days executing the exercise and realism was the keynote.

Realism required an enemy and an Aggressor Force was organized for this purpose. This force consisted of 4 platoons, each platoon representing a company. Inasmuch as this group of Aggressors would fight all 9 battalions (singly, of course), only 2 platoons were employed at



any one time in order to provide adequate rest and relaxation for its members. The aggressor uniform was the familiar Marine utility but was identifiable by red tabs on the collar and sleeve. In place of the camouflage steel helmet worn by the attacking Marines, the Aggressors covered their heads with a utility cap decorated with red stripes. To further ease identification, the Aggressors wore no armored vest which was required of each battalion.

The Exercise Director had 28 officers and 165 enlisted Marines. These figures included the Aggressor Force, communication personnel, safety NCOs and umpires. Umpires were assigned each staff section within the battalion and on command level, down to and including platoons. Under no circumstances were they to advise the commander on any decision which faced him. A 4-day umpire school was established and upon its termination the umpires fought the battle through by means of a map CPX and a CPX on the ground. Exercise Director Headquarters was then ready for business.

Although all 9 infantry battalions ran through the Nightmare problem, no two of them did it exactly alike which indicated flexibility and a refreshing lack of stereotyped ideas on tactics. There was enough similarity, however, to follow a "typical" battalion through its maneuvers.

Before departing his home area, the battalion commander received a copy of the general situation, safety overlays and a pyrotechnic code. Thus he was no stranger to the problem when his unit detrucked in the Nightmare Camp about noon of the first day. His first requirement is to place his organization in bivouac on

By LtCol J. A. Crown
and
LtCol W. R. Bennett

the assumption that his is a reserve battalion which soon replaced a battered interior unit on line. At 1545, accompanied by members of his staff, he reports to Exercise Headquarters at Base Camp for a briefing. Here is described the concept of the problem, the manner in which the problem will run, administrative details, a rundown on the Aggressor Force and safety information.

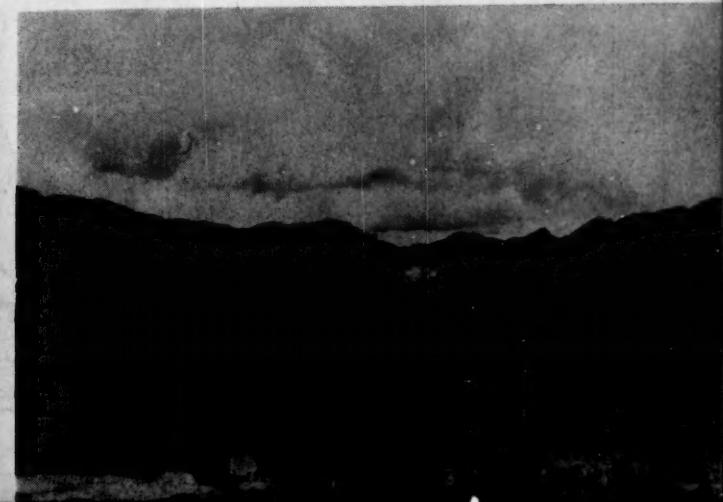
With that accomplished, Base Camp, as if by magic, is transformed into regimental headquarters and the battalion commander is given a warning order which directs him to prepare for a relief of the lines. He returns to his organization (usually about 1700) and takes the necessary steps to do his job. The vigilant umpires are watching. Does he issue a warning order? Is the essential information passed down the line? What steps does he take to accomplish the relief? At 0030 he receives the order to effect the relief prior to 0500, the umpires with his force acting as guides.

But the movement forward is not a quiet one along administrative lines. Aggressor mortar fire is thrown into the relieving unit and casualties and damage assessed. This is accomplished by having the Aggressors set off pyrotechnic streamers. Umpires with the battalion then drop smoke grenades where the mortar shells are supposed to have hit. Rifle fire (blanks) crackles ominously to the front as the Ma-

rines move over unfamiliar ground in utter darkness. No sooner are the troops on line than the Aggressors make their presence known by a series of harassing and probing attacks aimed at infiltration and capturing prisoners. Remember the name of this range? Nightmare!

Foxholes are already dug, of course, but it is no simple matter to occupy them and fight off the continuing attacks. As for the battalion command post, the commander may move into one already established by the unit being relieved. Communications wire is already in place there. But forward of the CP the battalion must lay its own wire. Some commanders choose the established CP while others prefer to organize new ones.

When dawn breaks on the weary men the Aggressors have vanished with the darkness. They are still in the area, but not readily visible. Now the battalion commander must begin vigorous patrolling to find the enemy and prevent a surprise attack. But patrols must be co-ordinated with the supporting arms' representatives at S-3, and if this is forgotten the patrol may be wiped out by friendly fire. In some cases this sad fate overtook the patrolling Marines. Sometimes patrols are declared all dead or wounded, presenting the problem of how to get the wounded back to friendly lines. Inasmuch as Hill 620 is the dominant terrain feature within the combat area, it is a wise battalion commander who places a strong combat outpost there. Happily a majority of the commanders fitted this description, but some sent too small a force and these were overrun by superior Aggressor forces.





Patrolling is not limited to the Marines, for the Aggressors undertake extensive patrolling of their own with the chief objective of capturing prisoners and spreading confusion in Marine ranks. Both sides are successful in taking captives and the "enemy's" men have certain vital information which they impart if properly interrogated. Smoke is used by both sides to cover disengaging actions and to confuse the opponent. The Aggressors even resort to psychological warfare by utilizing loudspeakers to urge the Marines to surrender themselves, hot chow being the reward for desertion. (This was no howling success.)

Overhead buzz OE aircraft which the battalion commander uses to augment his patrols. They seek out enemy activity, reporting it to the Marines. They may also be designated as simulated jets for close air support missions. But woe to the

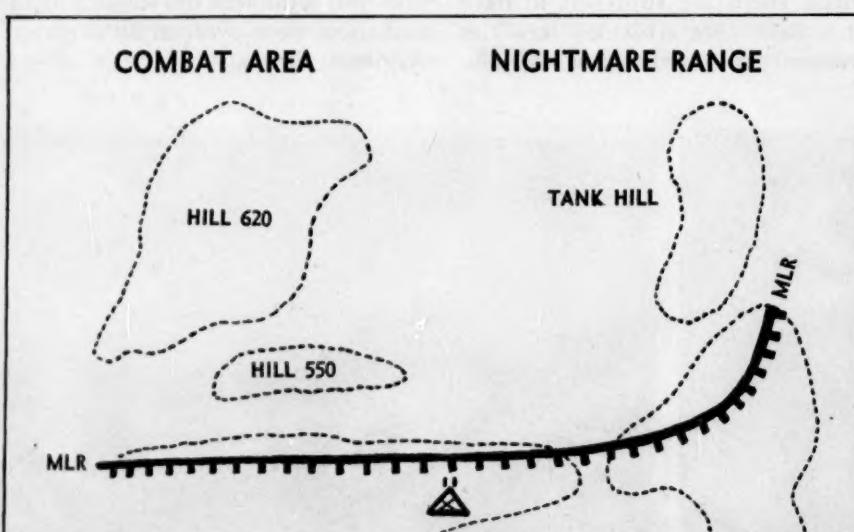
battalion commander who uses them thus and does not co-ordinate his patrols with the proper air liaison personnel. Umpires leap at such an opportunity to turn the friendly "jets" on friendly patrols. Doctors and corpsmen are participating in the operation by having to treat, tag and evacuate those individuals whom the umpires designate as wounded. These generally run between 75 and 80 men, and they will eventually return as replacements.

There is an occasional lull in the day's activities, but by early evening Aggressor activity picks up and an enemy build-up in strength is effected. During the day the Exercise Director has been watching the Marine dispositions to see if there is a weak spot which would constitute the desired place for a heavy attack. With the Aggressors' build up he makes his decision. If there is a combat outpost on Hill 620 it is now driven in, no matter what its

strength. By 1800 the listening posts on Hill 550 and Tank Hill are also driven in. (Umpires considered it a wise decision to establish listening posts on these hills, and a majority of the battalion commanders did so.)

Aggressor tactics are relatively simple with the onset of darkness. On one flank they make a feint while on the other (picked by the Exercise Director) they launch a main attack. The battalion commander's problem, of course, is to decide which is which. When and where will he commit his reserve? (A few battalion commanders ran into trouble here for they seemed to have decided ahead of time that the main attack would be launched at some specific spot. Consequently they concentrated their forces in that particular area. Umpires assumed in these rare cases that they had learned from predecessors on the range that the Aggressor attack was launched there. Naturally it was not, much to their confusion.) Umpires with the Aggressors never permit the feint to penetrate the Marine lines, but how can the battalion commander know that! The darkness is split by the firing of blank ammunition, the shouts of men on both sides and bursting illumination grenades. Between 2000 and 2100 the Aggressor main attack is forcing a withdrawal of one Marine company. Prisoners are taken as the defending company is slowly forced back from its hill positions.

The battalion commander is now faced with the decision of counter-attacking to restore the main battle position. Once his decision is made and announced, it generally requires





between 40 minutes and 2 hours to effect the restoration, although one battalion rapidly regained its positions within 15 minutes after launching the counterattack.

By 2300 the Aggressors are phased out, and in the darkness of the night the tired Marines keep on the alert, waiting for another enemy attack which never materializes. Between 2300 and 2400 the battalion commander receives an operation order which directs him to launch an attack at 0800 with Hill 620 as his objective. Here, blank ammunition will be dispensed with and every organic and supporting weapon with the battalion will have the opportunity to unleash its lethal power. At the same time the battalion commander will have the opportunity of advancing his battalion by fire and maneuver to seize the disputed hill.

The attack begins with artillery and 4.2 mortars laying down heavy concentrations in enemy territory.

In time the 81 and 60 mm mortars come into play, as well as machine guns and 75 mm recoilless rifles. White phosphorus shells effectively mark the target for close air support and the screaming Marine jets drop their loads with remarkable accuracy. At the prescribed moment the first infantry elements move out on the left to seize Hill 550. Here an unrealistic element is introduced, but one which facilitates control and observation during the training exercise. Officers cover their helmets with a bright red cloth, while NCOs use an orange one on theirs. By fire and maneuver the men steadily advance

and take their objective. No sooner have they seized and organized it than over on the right flank the tank-infantry teams work their way onto Tank Hill. With these two terrain features in his possession the battalion commander calls down a final heavy concentration of fire power, and shortly thereafter his Marines storm to the top of Hill 620's rocky crags.

There was no *school solution* to this final attack (nor was there one for any phase of the problem), but the *preferred solution* called for seizing Hill 550, seizing Tank Hill and then passing the reserve through Hill 550 to assault and seize Hill 620. There were at least 3 variations to this theme, which is not surprising nor cause for criticism. They included (1) seizing Hill 550, seizing Tank Hill and then assaulting Hill 620 from Tank Hill — a maneuver that involved movement across a boggy rice paddy; (2) seizing Hill 550, seizing Tank Hill and then assaulting Hill 620 at an angle between Hill 550 and Tank Hill; (3) seizing Hill 550 and then passing through to seize Hill 620, completely ignoring Tank Hill except to lay fire on it.

With Hill 620 in his hands the battalion commander now has successfully completed his Nightmare problem. That brings the exercise to a close except for a brief critique in which are brought forth those points which warrant criticism or merit commendation. The troops move back to their assembly area to entruck.

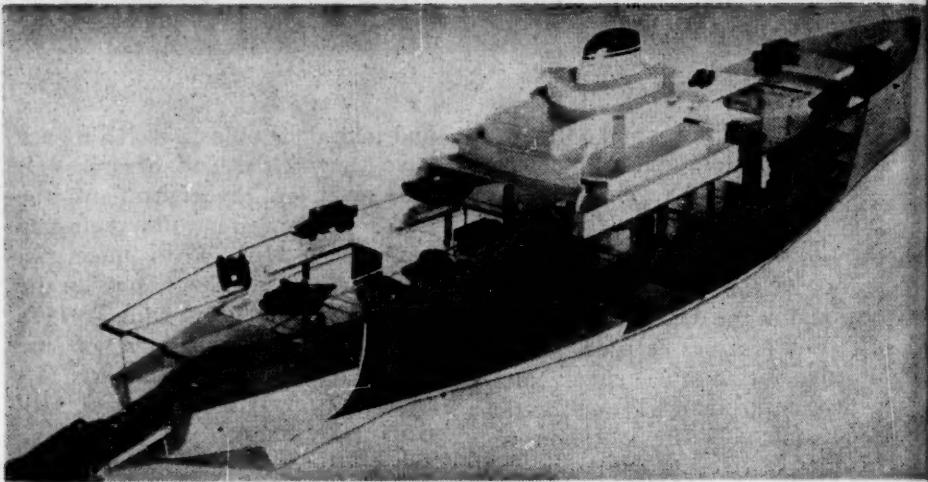
Throughout the operation the umpires have worked with tireless

vigor filling out detailed check sheets which will provide invaluable data to the battalion commander for subsequent training. With this information he should be able to correct deficiencies and improve his operations. Safety NCOs have been working with the umpires on all command levels, the latter doubling as safety officers during live firing. At times, particularly during the final attack phase, their activities slowed movement to a frustrating pace, but safety measures are essential.

Those battalion commanders who were new to their command found the problem a valuable one aside from the experience of actual control. They found that time and space factors are somewhat different when troops and equipment are involved than they are in a mere CPX. They also learned, through the machinations of the umpires, that information on the enemy must move rapidly from front to rear. Considering the limitations imposed on units and umpires alike by inescapable artificialities, the problem was one of excellent training for the infantry battalions of the 1st Mar Div, as well as for their supporting arms. Commanders and their troops, from battalion down to the individual rifleman, were given an opportunity to conduct and participate in a live firing problem involving day and night operations, movement, the use and co-ordination of supporting weapons. Although regarded at the moment as a nightmare on Nightmare Range, the results produced by the problem were well worthwhile indeed.

USMC

MOBILE LOADING IN THE ASSAULT PHASE



Future amphibious warfare demands transport facilities designed to handle speedy unloading of vast tonnages over dispersed areas

By LtCol F. A. Long

THROUGHOUT THE HISTORY OF warfare the introduction of new methods of destruction of both personnel and materiel have inevitably resulted in the development of countermeasures in the field of defensive weapons and techniques, active as well as passive. Thus we find shield against the spear, anti-tank weapons versus the tank, anti-aircraft guns and the movement of both troops and supplies under the cover of darkness as defensive measures against hostile aircraft. The desire for survival has continually stimulated man's ingenuity in this unending chain of countermeasures.

The minds of men the world over have, since Hiroshima, been challenged by the knowledge that with

the birth of this new family of weapons, countermeasures must be developed if armies and even nations are to survive. The means by which such weapons may be delivered are in keeping with our times—by aircraft, submarine, artillery, guided missiles and even by hand. Their destructive capabilities are unique—never before has the human race been faced with such magnitudes of force.

Offensive and defensive measures have in the past, against even the most powerful of conventional weapons, been for the most part effective. Only in isolated instances have concentrations so saturated a major objective as to render it completely untenable. The destructive

capabilities of such weapons were infinitesimal when compared with the "A" and "H" series weapons of today. During WWII the loss of 90 per cent of an aerial armada virtually negated the effectiveness of its mission—its remaining bombs were few and their destructive capacities limited—quantity was the order of the day.

Despite the latest developments in gunnery even the most optimistic give a potential enemy the capability of delivering these new weapons—quantity on a specific objective is not required. The problem of passive defense then, resolves itself into: 1) Increasing the ratio of targets to those carriers of these weapons which may succeed in penetrating the de-

fensive screens and; 2) Dispersion of materiel and personnel within a potential target area so as to minimize the effects of a detonation.

By its very nature the amphibious assault provides for maximum flexibility and surprise. Through flexibility, the landing force may be tailored so as to effect landings at any number of geographical locations; thereby increasing the probability that one or more of the landings will not fall within the capability of destruction by the relatively few enemy elements which may have succeeded in penetrating the defensive barriers. Surprise, coupled with offensive and defensive measures, offers a possibility of accomplishing the ship-to-shore phase prior to atomic retaliation by the enemy.

To these qualities of flexibility and surprise must be added a third, if a successful pattern is to be established within the field of passive defensive measures. It is that of accelerating the landing and dispersion of personnel and materiel during the assault phase. If tactics, based on the presence of these new weapons are to be supported, then corresponding advances must be made in the field of logistics. To date, little in the way of proven logistical techniques have been developed.

Mobile loading, has in some circles, been advocated as being the solution to the problem of landing and dispersing the vast tonnages of supplies and equipment required by a landing force. Before an analysis of this technique of mass mobile loading, as it is now projected into theory is conducted, a review of certain logistical data is in order.

For centuries, and on all scales, war was conducted in which the individual needs of the soldier, as provided by his army, were negligible. He lived off the land and as often as not provided his own clothing and weapons. The logistian in those times had few problems indeed. Since the 16th Century and with each succeeding war, the tonnage required to maintain an army in the field has climbed in geometric proportion. A review of statistics shows that, on an individual basis, it required approximately 6 times as much to maintain an individual in the field in WWII as it did during WWI. An analysis

of this increase reveals that the tonnage of vehicles shipped to Europe during WWII increased 58 times over that of WWI; petroleum products 43 times and explosives 4 times. Day by day the trend is to greater mechanization with corresponding increases in maintenance and field requirements; to larger caliber weapons with ever increasing rates of fire; to jet propelled aircraft whose fuel consumption dwarfs that of the piston driven aircraft of 1941-1945. In WWII, approximately one million items were required by our services; with new and more complex equipment being developed daily, this figure will surely increase. So much for materiel requirements and trends.

From an amphibious point of view, what do we possess today capable of lifting and landing the tonnages heretofore discussed? Outside of developments in the aviation field, we have essentially the same seagoing transportation as we employed during WWII — landing ships (primarily LSTs), APAs, AKAs, LSDs and a fleet of merchant shipping. In essence, and amphibious wise, we have not improved our sea lift capabilities.

Within the field of aviation the picture is much improved. During WWII the C-47 with its limited capacity and range was the aerial workhorse — today we possess a whole series of cargo aircraft whose ranges and capacities far exceed those of the "47." The employment of aircraft, however, for the logistical support of a large scale amphibious operation in the face of a world wide conflict is, at best, a supplementary means. Before this means of transportation can be effectively utilized, airfields must either be constructed, or captured and repaired. In that most modern fields have demolitions built in, the former course would in all probability be more expeditious. In any event, it is most improbable that these conditions can be met in less than 10 days after the seizure of the terrain itself. Even when seized or built, the problem of maintaining such fields is at best problematical where the enemy possesses atomic weapons. During, at least, the initial 10 day period, supply by fixed wing aircraft must be overruled as a primary

means of delivering supplies. In addition to the problems imposed by airfield requirements, supply by air must be tempered by the following additional factors:

- 1) Timely, adequate and continuous delivery of supplies in the face of enemy aerial interception, adverse weather conditions and range of operations.
- 2) Limitations and problems inherent in parachute drops.
- 3) Limitations in both capacities and quantity of carriers and associated shipping for helicopter operations.

So far, the problem of accelerating the landing and dispersion of materiel remains unsolved during this initial assault phase when viewed in the light of defensive measures against atomic weapons.

Anyone who has ever witnessed a full dress amphibious operation must be thoroughly impressed by the gigantic effort and time expended in landing the supplies and equipment required for the prosecution of the assault. The manhandling of the materiel in the holds, the slow moving winches, the travel time required for round trips of the landing craft or amphibious vehicles in the ship-to-shore movement of the materiel, the maze of men and machines at the unloading points on the beaches and, finally, the unloading of those same supplies into beach dumps requires much time and manpower. Contrasted with this tremendous expenditure of time and effort is the efficient picture of preloaded vehicles driving down the ramps of landing ship and delivering their loads to inland dumps or direct to using units. Here then is the solution to our problem—the solution, were it not for the existence of 4 factors:

- 1) Quantity of materiel to be lifted.
- 2) Quantity of vehicles required for the lift.
- 3) Quantity of shipping required for this type of lift.
- 4) The immediate need for an adequate roadnet in the objective area which will permit trafficability from the beaches.

Let's consider these negating factors and determine individually as well as collectively, why they prohibit "mobile loading" on a mass scale in a ship-to-shore operation. Before doing so, however, the qualifying term "ship-to-shore" operation

should be noted. Numerous campaigns during WWII, of a ship-to-shore nature, were successfully conducted employing the mobile loading technique. Such operations were characterized by one or more of the following:

1) A limited size landing force. 2) Minor enemy resistance or none at all. 3) Negligible distances between the mounting out areas and the objective, thereby permitting assault shipping to effect subsequent "turn around" lifts. 4) Motor transport augmentation to the landing force in sufficient quantity to permit a vehicular shuttling effect.

The supply of US Army units in New Georgia, by mobile loaded LSTs from Guadalcanal, exemplifies an operation wherein mobile loading was effectively employed.

In order to appreciate the magnitude of tonnages involved in an amphibious operation, let's review a few figures. After one successful amphibious operation in the Pacific during WWII, a given division reviewed and analyzed the supplies and equipment it had lifted in its assault shipping on the operation just completed. It was the unanimous opinion of commanders and staffs alike that too much in the way of unnecessary material had been carried. A thorough study of applicable T/Es and T/As were made in an all out effort to scale down to the bare essentials for future operations. Shortly thereafter the division mounted out for another campaign with a mere 27,000 tons of materiel which, incidentally, included less than 50 per cent of its organic transportation.

Depending upon the situation, the supplies and equipment necessary for an amphibious operation will vary from one operation to the next, but in any event we can start our tonnage adjustment, on the division level, up or down, from a figure in the vicinity of 19,000 tons. This figure represents authorized allowances of organizational equipment alone. Add to the adjusted tonnage of organization equipment required, multiples of the following, and one begins to appreciate the magnitude of tonnages to be dealt with.

One "C" ration per division—110 tons. One day's fuel per division—350 tons. One unit of fire per division—1,440 tons.

In consideration of the second disqualifying factor enumerated above, consider the number of 2½-ton cargo trucks that would be required to mobile load 10 days "C" rations and 5 units of fire for a division alone. From the factors listed in the previous paragraph we have approximately 8,300 tons to be mobile loaded; expressed in terms of 2½-ton truck loads, this amounts to 3,320 trucks; expressed in terms of amphibious tractors, it would require approximately 1,383. The transportation of mobile loads, per se, in APA-type shipping is beyond considering since the average ship of this type is capable of lifting, at best, approximately 15, 2½-ton trucks. Considering the above trucking requirements in terms of AKAs, we arrive at a shipping requirement in the vicinity of 74 AKAs. The employment of LSTs would give rise to a need for approximately 70 ships of this type. The utilization of amphibious tractors in combination with LSDs reduces our needs to a mere 40 LSDs.

From the point of view of utilization of shipping capacity alone, mobile loading produces unacceptable results. The below listed tabulations are based on the upper limits of normal embarkation planning factors.

use by wheeled vehicles in large numbers. Initially, only the most ideal conditions would provide such a complete and usable roadnet. Enemy demolitions, fire and mines, singularly or in combination, could restrict or prohibit such mass vehicular movements. The lack of an adequate roadnet would result in the mass concentration of vehicles and supplies in the immediate beach area and create a most remunerative target thereby inviting disaster for the entire landing force.

One school of thought proposes to land such mobile loads on an "as required basis" or in very limited number—the remainder to either remain afloat in the immediate sea areas or for the shipping which is lifting these mobile loaded assault supplies to be "phased-in to the objective area."

As has been shown previously, the inefficient employment of shipping space, where mass mobile loading is employed, must be compensated for by increasing the quantity of ships. Such transportation must be available in the immediate sea area if adequate logistical support is to be made available to the assault forces—as such it would, in the numbers required, provide a most lucrative target. In addition, many conditions favorable to the attacker must be met before landing ships carrying

	Average Combat Load S/T	Capacity of Mobile Loaded Bulk Cargo S/T	Per centage of Combat Load Capacity Utilized by Mobile Loading
LST	500	121	24.2%
AKA	1500	158	10.5%

The shipping requirements and percentages outlined certainly substantiate the third factor listed above.

Our problem restated, is to accelerate the landing and dispersion of materiel as a passive means of defense against atomic weapons. The radius of the destructive effects of such detonations, being what it is, requires that the dispersion we seek be of a high degree. In terms of trafficability, with the sea to our backs, and the enemy possibly in all other directions, it means that we must have at our disposal, in the objective area, an adequate roadnet for

the mobile loaded supplies can be beached and those supplies be made available. The use of amphibious tractors would nullify these beaching requirements and to a limited degree, even the need for a conventional roadnet, but their astronomical requirements for LSDs and/or LSTs to provide for their amphibious lift precludes their usage for this purpose.

The "phasing-in" of shipping to the objective in small increments (small only in the sense of the quantity of mobile loaded supplies) makes available to the commander ashore, at best, very limited re-



Organizational equipment must give way to rations, fuel and ammo

plenishments to cover unexpected contingencies—enemy aerial or sea interception of this shipping could easily cost him the campaign—continuous and adequate logistical support is mandatory and is particularly critical in the early stages of an amphibious assault. The build-up of levels ashore must be continuous and accelerated immediately at every opportunity. This build-up must not be made dependent on a predetermined time table which, when employing this phasing-in technique, would require virtually split second timing with no built-in latitude for errors. Then, of course, there is the matter of providing naval and aerial escorts and protection for the multiple increments of phase shipping.

The reduction of organizational equipment consigned to assault shipping was well manifested during WWII as was demonstrated in the case of the division previously discussed. The mobile loading technique with its tremendous demand on motor transport and/or amphibious vehicle facilities including maintenance equipment. Personnel and spare parts compounds this problem instead of reducing it.

The disadvantages of the mobile loading technique as a primary means of supply has been developed and corresponding data presented on a division basis. When projected to a 3 division force, for example, the requirements of this technique reduces it to the impossible.

Mobile loading accelerates the landing of materiel by eliminating the ship unloading process as we know it and secondly, by overcoming the need for transferring sup-

plies and equipment from landing craft to vehicles at the high water mark. This second accomplishment follows irrespective of the mobile loading technique. If an amphibious tractor battalion and an amphibious truck company (reinforced) are considered as normal attachments for a reinforced division, these units collectively have a lift capacity of approximately 1,600 tons when committed to their logistical missions. As was pointed out previously, the transports and cargo ships available, today, are unsuitable from the standpoint of cargo handling in an amphibious assault. These ships are of conventional design, complete with winches and vertical hatches. A vessel which will permit the simultaneous and expeditious loading of numerous amphibious vehicles, employing, possibly mechanical and horizontal conveyor systems, are required. Such vessels should possess shallow draft characteristics in order to be able to move in close to the shoreline thereby shortening the waterborne shuttling distances; they should possess built in refueling facilities for amphibious vehicles so as to permit refueling and loading processes to be conducted simultaneously. Packaging of supplies bears a re-evaluation with emphasis on standardization and lightening of packaging materials.

More than ever before in modern warfare, organizational equipment other than weapons, motor transport and mechanized maintenance equipment must give way to rations, fuel and ammunition. Items which we have grown to consider necessities can no longer be lifted in assault

shipping. This must be recognized and practiced if we are to succeed in the face of atomic weapons. Organic transportation must be carefully screened and maximum utilization made of its mobile load capacity with critical supplies. Trailers, unless their capacities are commensurate with the square footage they occupy should not be employed. LSTs lifting amphibious vehicles must be understowed to the maximum commensurate with their beaching drafts. [Understowing is the loading of ammunition in the well deck, covering it with dunnage, then loading the vehicles on top of it.] Logistical vehicles, preloaded, should be concentrated to the maximum extent possible, on understowed LSTs thereby more fully utilizing the cubic capacities of these vessels and at the same time familiarizing the drivers with the ships' crew, cargo and characteristics which, collectively, will facilitate unloading.

Helicopters as we know them today, even with their limited cargo capacities, are an invaluable logistical adjunct during the early phases of an operation. As was pointed out previously, helicopter demands on shipping will probably limit the number available for any given operation. This limitation however, is partially overcome by their speed as compared to those of landing craft and amphibious vehicles. Experimentation with LST deck-loaded "pods" of various types of supplies to be lifted and carried by helicopters should develop an accelerated technique for landing critical items.

Collectively, there are various means for expediting the landing of those critical items without which an amphibious operation cannot be launched and sustained in the face of an atomic weapons threat. Developments along these lines are in the making without placing reliance on any one given technique and without increasing, beyond all proportion and reason, the need for assault shipping or logistical transportation. Stress, however, must be placed on the development of shipping designed for the purpose of unloading troop supplies and equipment in such a manner as to expedite the landing of such materiel; the lack of such shipping today is the major obstacle to be overcome. USMC



Can we allow the Communists the advantages
conflicting codes when we inherit

PRISONER IN THE KOREAN ARMISTICE NEGOTIATIONS

Synopsis

THE Korean war brought two doctrines into conflict—a coalition of national states, who followed the Geneva Convention in their treatment of POWs on one side, as opposed to the Universal Soviet state whose attitude toward POWs was based on the expediency of civil war and international revolution which recognized no responsibilities toward the obligations of national states. During the Russian Revolution ALL captured enemy personnel were exterminated. The Chinese, however, refined the Russian doctrine into a "new treatment" which did not recognize the allegiance of POWs to their mother countries. At such times as the Reds found it beneficial to their interests, however, they did not hesitate to demand strict adherence to certain articles of the Geneva Convention. This was the situation our negotiators faced when they met their Communist counterparts across the conference table at Panmunjom.

Concluded

AN IMPASSE HAD NOW BEEN reached on the prisoner of war issue. Realistically, the Communists were not dealing from a position of strength. Denied air and naval capabilities they were opposing the balanced forces of the UN with manpower alone and they were enduring severe hardships. North Korea was devastated—its population reduced by perhaps as much as one-fourth. The remaining populace was chained to the wheel of war. It must produce food for the soldiers and keep military supplies moving from the sanctuary beyond the Yalu to the front. This was a prodigious and heart-breaking task in the face of the incessant air and naval attacks. To it, thousands of civilian laborers as well as soldiers were sacrificed. Disease, too, was rampant because of the abnormal conditions created by

the war and to the lack of adequate public health services, and only by inventing the myth of bacteriological warfare could the Communist authorities turn from themselves the wrath of their long-suffering people.

The military outlook, too, was discouraging. Communist commanders had been forced to recognize that a full-scale offensive to drive the UN forces into the sea was beyond their capabilities. Without air support, with limited mobility, limited logistic support, limited fire support and limited armor, they could do no more than defend their positions or launch limited objective attacks designed to inflict casualties upon the UN forces to offset the unremitting pressure of air, artillery and naval gunfire attack.

Such limited objective attacks were not inexpensive. Manpower losses to the Communists in making such attacks exceeded by many times

ages
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the disadvantages of both?**



Wide World

ISSUE



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the casualties inflicted upon UN forces. More significant to the Communists than the loss in human life, was the fact that the material required to maintain an army of more than a million men in combat in Korea and to conduct occasional limited offensives constituted a severe drain upon their resources—a drain which threatened the attainment of the economic and industrial goals of Communist China's 5-year plan.

With this discouraging picture at their backs, the Communist leaders nevertheless faced the representatives of the UN at Panmunjom with iron faces. That they wanted to stop the military operations there is little doubt, but an armistice per se was not their objective. Much as they might want to escape an unfavora-

ble military situation, it would be wholly alien to their thinking to consider the cessation of hostilities as an end in itself. An armistice, no less than war, could be looked upon only as a means to an end. That end was the unification of Korea under Communist control, and an even greater objective—Communist domination of the balance of Asia. The Communist aim as regards an armistice was to gain terms which would not be an albatross about their necks in the attainment of these goals, but which would assist them in their realization.

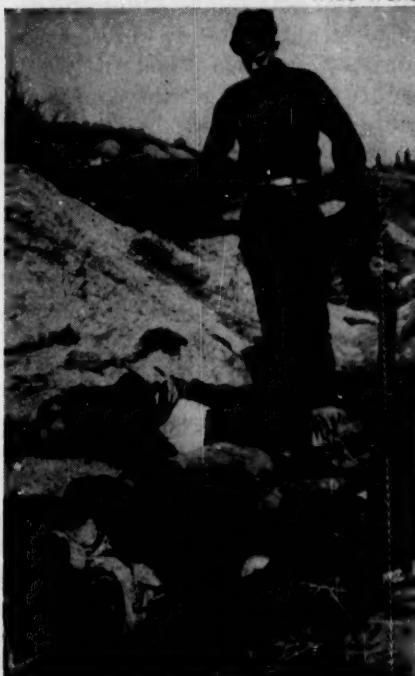
To this end they must negotiate patiently and skillfully, so long as they felt there was any prospect of success, without regard to the temporary frustration of their important economic programs or the cost in

human life and suffering entailed by the prolongation of the negotiations. These temporary inconveniences must be borne for the sake of the establishment of a favorable atmosphere for the attainment of long-range political objectives.

A fundamental objective of the Communists in respect to the truce was the appearance of the Communist victory in Korea. This factor, which was present from the first day until the last, manifested itself in many forms. Let me illustrate.

Having participated in the preliminary arrangements on 8 July for the opening of the armistice conference on 10 July 1951, the writer conducted the armistice delegation's first motor convoy to Kaesong on the latter date. En route we were detained for more than an hour at the enemy outpost at Panmunjom. "We must make preparations to ensure

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your safety," explained the outpost commander after telephoning his superiors at Kaesong.

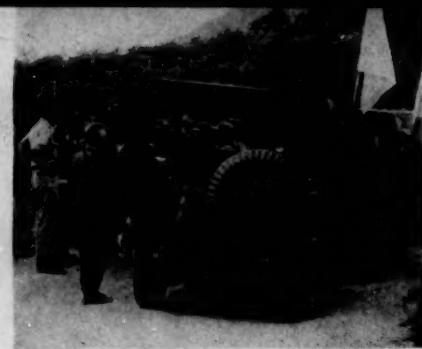
The real reason for the delay was disclosed later. As the convoy approached KAESONG (each vehicle marked according to agreement by a large white flag) three unmarked vehicles filled with Red officers in dress uniform pulled out of a side street and took position in front of the lead vehicle. As the procession wound through the town these officers ludicrously assumed the demeanor of conquerors and perhaps half a dozen cameramen dropped off along the route to photograph the spectacle. Without doubt these propaganda shots have been circulated throughout the Communist world to support the claim of Communist victory in Korea.

Having come to the conference table only because they were near defeat, the Communists were prepared from the very first to make the most of the negotiations to create what is known in political circles as a "climate of victory."

Two years later I arrived at Panmunjom one morning only to discover that the building in which the armistice was to be signed was displaying, just under the cornice on each end, a 6-foot Picasso peace dove painted in white against a robin's egg blue background. When it was pointed out to Communist representatives Col Ju Yon of the Peoples Army and Col Pu Shan of the Chinese Volunteers, that the display of this symbol was in violation of agreement that standards would be displayed only on the conference table, Ju Yon said "At this time when the armistice is going to be signed we could not think there would be anybody who would oppose the dove of peace."

I pointed out that while the dove was traditionally a symbol of peace, it had, as a symbol, become particularized—that if our side were to display a symbol of peace it might very well take the flag of the UN. Since the Communists would have been on poor grounds in a controversy over this matter, and since there was no real need to use this building for the signing, the doves were quietly painted out the night after they made their appearance.

For the same purpose, the Com-



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**Marked according to agreement,
"escorted" by armed Communists**

munists sought to hold the conference in territory under their control. When this was no longer possible they sought always to provide all the visible facilities at the conference site, such as buildings, leaving it to the UN Command to provide equally important, but less noticeable, services as heat and light.

Then, too, they sought, particularly at newsworthy events such as the ceremony which marked the signing of the armistice, to restrict facilities for the press to the end that the news representatives accredited to the UN Command would not outshine, or outnumber, their own press corps.

Incidents such as these illustrate the extremes to which the Communists were willing to go to create the appearance of victory so essential to their post-armistice political program.

This factor appears to have influenced decisively the Communist attitude toward the prisoner of war issue. The widespread knowledge that some of their captured personnel refused to return to Communist control following an armistice, and that the Communists were unable to bring about the delivery of such recalcitrants by force, might have an adverse effect upon the future politico-military programs of the Communists both at home and abroad. So long as there was any possibility of success, the Communists must make every effort to gain armistice terms more favorable to their future plans—that is, to obtain the return of all their captured personnel.

One may ask why the Communists continued to strive for this objective in the face of the oft-reported statements of UN spokesmen that no concessions would be made from the principle of no forced repatriation. The answer lies, no doubt, in the fact that the Communists are politi-

cal realists. They have little respect for the accepted forms of diplomatic exchange. Adept themselves at bluffing, they do not accept the words of a governmental representative at their face value. They go behind his words to determine how accurately they reflect the attitude of the government or governments he represents, and more basic still, how accurately they reflect the attitude of its citizens; because they know from experience that in a genuinely democratic country, government policy can be changed if it does not rest on a solid basis of the beliefs of a majority of its people.

Sources available to the Communists for such information included the press and radio of the Free World, as well as certain complex diplomatic channels. Information obtained from these sources influenced the enemy far more than did our negotiators at Panmunjom. So long as evidence could be found of differences of opinion on the Korean war among the governments and peoples of the UN, their spokesmen at Panmunjom could not hope to persuade the Communists that the stand taken by the UN Command on the exchange of war prisoners was unalterable. It is quite likely that such differences of opinion prolonged the war by encouraging the Communists to hang on in the hope the UN would eventually make the concessions which were considered so important by the Communists.

Viewed in this perspective, the inclusion of the Korean question in the debate during the US national election of 1952 may have been a factor in our failure to attain an armistice at an earlier date. The UN stand on the prisoner issue was not called into question during this debate which centered on the conduct of the war and whether US policy had contributed to its creation. Nevertheless, the controversy did reveal considerable dissatisfaction with the Korean war.

This and similar discordant notes, inevitable byproducts of democracy and of an alliance of nations, encouraged the Communists to believe that UN patience could be worn down until concessions would be made on the prisoner issue as the price of peace. They must have been seriously disappointed then, on 8

October 1952, when the United Nations, after having made known the terms under which it was willing to resolve the issue, recessed the negotiations at Panmunjom indefinitely. By this action the UN gave the most convincing evidence possible of their determination to make no concession which would result in the forcible delivery of unwilling slaves to unwanted masters.

The political realists of North Korea and Communist China would recognize that this step, which they could categorize as "breaking off the negotiations" could not be taken at the whim of the negotiators. If this step led the Communists to suspect that there existed a high degree of unity of purpose among the peoples and governments of the Free World with regard to the prisoner issue, the formal ratification of the Indian Resolution by 53 nations voting in the United Nations General Assembly in December must have confirmed their suspicion.

The UN Command had consistently rejected the Communist claim that prisoners who refused repatriation were being forcibly detained. In order to demonstrate this the UN Command had proposed consistently to the Communists a rescreening of the unwilling prisoners by an impartial neutral body. It had invited the Communists to send representatives to view the process and to verify to their own satisfaction the attitude of the prisoners.

The Indian Resolution developed this issue more clearly. It recognized that the attitude of a prisoner towards repatriation might conceivably be affected by the circumstances of his detention and it restated the principle of no forced repatriation, "No force or coercion whatever will be permitted either to effect or to prevent the repatriation of war prisoners."

To implement this principle the resolution provided that prisoners not desiring to be repatriated be placed in the custody of a neutral commission for a period of 60 days. During this time representatives from the side to which they formerly belonged were to be given access to the prisoners to explain to them their full rights to return home. Those who responded favorably to these "explanations" would be re-

patriated immediately. Those who still opposed repatriation at the end of the 60-day period would be disposed of by the General Assembly of the UN.

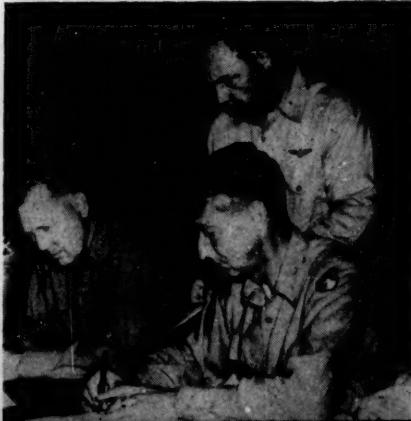
Obviously, under this proposal the manner in which the "explanations" would be given and their nature were critical areas. Given sufficient latitude, the Chinese Communists, who have developed and refined the art of "brainwashing" as a political tool, might overcome the scruples of the most reluctant prisoners.

While the Communists rejected the Indian Resolution initially, it was nevertheless something to which they could return. Fifty-three nations had indicated that they were willing to resolve the issue on the basis of that resolution and the Communists were assured that they could get these terms at any time they desired.

It was not too long before the Communists decided that the time had come to draw upon the asset they had in the Indian Resolution. Policy changes resulting from the death of Stalin or other factors may have dictated this decision. On the other hand, the new administration had come into office in Washington and there were no indications that there would be any weakening of the UN stand on the prisoners. In fact, the order to the 7th Fleet which had neutralized Formosa was revoked; a decision to provide support for increased numbers of ROK troops was announced; and there was talk of stronger measures to bring the conflict in Korea to an end. Moreover, it appeared that the people of the US as well as the other nations contributing forces to the United Nations, were accepting the policies of the new government with

General Clark's letter paved the way for the new gambit

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equanimity. They seemed to accept the fact that the war would continue indefinitely unless the Communists moved to alter their position on the war prisoners.

Communists fight for their objectives and they fight hard, but they are realists. They do not often overextend themselves or overplay their hand. However it came about, they decided they were up against something solid in the attitude of the UN on the issue of forcible repatriation and that they must make some adjustment in their position since the advantages they might derive from further prolongation of the stalemate were not worth the cost. This does not mean that they decided then to accept the Indian Resolution. Once the negotiations were resumed it might be possible to get better terms. Such an effort would be made as a matter of course. The main thing was to get the talks started again.

A letter from UN Commander-in-Chief, Gen Clark, prepared the way for the Communist gambit. It will be recalled that the Communists had, just prior to Christmas 1951, dramatically released the names of the prisoners then in their custody in the hope that this would stimulate a concern for the return of the prisoners which would be reflected in the negotiations. Their action did not cause the UN Command to make the desired concessions. However, there was ample evidence that the Communists had gauged their audience correctly and that the course of action was essentially sound. Government agencies and the news media outdid themselves to publicize the names of the prisoners, as well as various individual and group pictures provided more or less covertly by Communist press officers. Concern for the welfare of the prisoners and interest in their return simultaneously soared to unprecedented heights in the United States and although it did not bring about the desired concessions it subsequently became a factor in the growing dissatisfaction with the Korean war. This vein was not yet played out. Another trip to the mine was indicated.

On 22 February 1953 Gen Clark addressed a letter to Kim Il Sung and Peng Teh Huah proposing once

again the implementation of those articles of the Geneva Convention which provide for the exchange during hostilities of prisoners whose sickness or injuries would preclude their early return to combat. There was no reason to expect a favorable response since the Communists had rejected this proposal several times during the course of the negotiations. The reply was not received until 28 March. Surprisingly it acquiesced in the immediate exchange of sick and wounded prisoners. It also suggested the resumption of the negotiations on the exchange of the balance of the prisoners—"the only issue standing in the way of an armistice." The sick and injured prisoners were the pawn in the opening play.

The cynicism of the Communists in the use of such tactics stood revealed a short time later. Having agreed to exchange the sick and wounded, the Communists gave only token compliance. Their selection of prisoners to be repatriated under the agreement appears to have been completely haphazard. Some of the prisoners delivered for exchange were in good health, while hundreds of seriously sick and injured remained in Communist prison camps. Less than one-half of the known sick and injured had been delivered when the Communists announced the exchange had been completed.

When these facts were brought to their attention in a protest by the UN Command, Gen Lee Sang Cho asserted flatly that all sick and injured had been delivered. He went on to add that the protest was a transparent attempt to disrupt the negotiations then in progress on the principal question, the exchange of the balance of prisoners.

When operation "Big Switch"

Lee Sang Cho — "All sick and wounded have been delivered"

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started a few weeks later, the hundreds of sick and injured prisoners brought to the exchange points constituted incontrovertible evidence of Lee's deceit. These prisoners were witnesses to the Communist lack of regard for the obligations placed upon them by a formal agreement which they had entered into freely.

In the letter suggesting the resumption of negotiations, the Communists had for the first time recognized that there might be prisoners who resisted repatriation. They proposed that prisoners be repatriated in 2 stages; first, the direct repatriation of those who insisted upon it, and, second, the delivery of the remaining prisoners to a neutral Repatriation Commission.

Senior Delegate, Gen Harrison, in reply to this letter, indicated that a solution might be worked out along these lines provided custody of the prisoners was given to a neutral such as Switzerland or Sweden, custody was taken within Korea and the duration of neutral custody did not exceed a reasonable period — say 60 days.

Following this limited exchange of views the negotiations were resumed on 26 April. Gradually the new Communist proposal unfolded itself. While the Communists recognized that some prisoners resisted repatriation, they did not intend that any would escape it. Their view was succinctly stated by one of the Communist press corps, "Directly or indirectly, we will get all the prisoners back." In essence the Communists proposed that the prisoners who opposed repatriation be given into the custody of an unspecified Asian power; that all the prisoners—even Koreans—be transported overseas to the territory of that power; that the Chinese and North Korean regimes be afforded unrestricted access to the prisoners for the purpose of persuading them to return home; that the prisoners be held in custody until their repatriation was effected; and that no alternative to repatriation be afforded them. That is, no alternative except to remain indefinitely in captivity, continuously subjected to the brainwashing techniques of the agents sent to persuade the prisoners to accept repatriation.

That this proposal embodied forced repatriation, even if it did

appear in a slightly different guise, there could be no question. It was entirely unacceptable to the UN Command and it is doubtful that the Communists entertained any serious thoughts that it would be accepted. It was simply that their doctrine for the conduct of negotiations required that this extreme view be put forward seriously and supported for a given period of time. Somewhere between this extreme and the Indian Resolution a common ground might be found. Certainly it would not be necessary to accept anything less than the Indian Resolution. Only by playing upon the obvious desire of the UN for an early termination of the fighting would it be possible to determine exactly how far they were willing to go in resolving this issue.

The final agreement reached after 6 weeks of negotiation could not please either side fully; neither could it be regarded as wholly unsatisfactory. The composition of the 5-power Repatriation Commission was not reassuring to anti-Communist critics. The neutrality of the Communist nominees, Poland and Czechoslovakia, was not a reality but a technicality. Switzerland and Sweden for their part would not be similarly partisan. They would observe scrupulously a standard borne of a long tradition of neutrality, regarded by some as not wholly realistic in this day and age. Obviously, the role which India would play would be of critical importance.

"Explanations" were to be allowed to be conducted during a 90-day period in place of 60. However, certain safeguards were established which would insure that the explanations were not coercive; restrictions on the number of agents, their hours of operation, and the nature of the material used in making the "explanations." Finally, the prisoners who continued to oppose repatriation after 90 days of "explanations" would not be free even then, for it was agreed that the question of their disposition would be submitted to a political conference between the two sides. But neither would the prisoners be retained in captivity indefinitely through the inability of the political conference to reach a decision, for if a decision were not reached within 30 days the



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Rhee—positive action stalled the negotiations temporarily

prisoners were then to be released.

This agreement took the form of a collateral agreement, "Terms of Reference for Neutral Nations Repatriation Commission," which was to become effective on the date the armistice became effective. Following signature of this collateral agreement on 8 June, the negotiators turned to a redetermination of the military demarcation line and to certain relatively minor differences which remained to be resolved before the armistice agreement itself could be signed.

This task was interrupted by President Rhee's release on 19 June of 25,000 of the prisoners of Korean nationality who were opposed to repatriation. The release of these prisoners had been proposed from time to time ever since the prisoner issue became the major remaining issue in the armistice negotiations. Indeed, the civilian internees against whom the Communists had also asserted a claim had been released when the talks went into a stalemate the preceding fall. Protagonists held that the release of these prisoners of war was fully justified by the Communist "release" under far more questionable circumstances of upwards of 50,000 of our personnel and on the grounds that it would bring the war to an end. The Communists would protest, of course, as we did respecting our personnel "released" by them, but confronted by the accomplished fact of the prisoners' release they would be free to sign the armistice. Had the then current talks failed, this viewpoint might have prevailed eventually, in which

case the UN Command itself would have released these prisoners. But the UN Command had not yet reached this view when the conclusion of a tentative agreement on their disposition made it unnecessary.

In relation to the Communist practice, Rhee's action was exemplary. He refrained from releasing prisoners of Chinese nationality. As regards prisoners of Korean nationality he released only those who had been determined in a screening conducted by the UN Command to be strongly opposed to repatriation and indeed not all of these. Finally, he did not impress the released prisoners into his military forces as did the Communists.

Nevertheless, Rhee's action was widely condemned as improper, and in the sense that his release of the prisoners delayed the immediate attainment of an armistice this criticism was justified. He had created the possibility of a division between the UN and the ROK and between the member nations of the UN, which could not be overlooked by the Communists.

The armistice must wait until all possible advantages had been extracted from this opportunity. An additional 30 days was devoted to this effort but the results were limited, because of the wisdom and patience shown by UN leaders and by President Rhee in composing their differences. Having failed to provoke hasty and intemperate responses, the Communists, on 19 June, indicated their willingness to go ahead with the armistice.

Was the final settlement reached after 20 months of negotiations an equitable solution of the prisoner issue? The answer is "no." The Communists had used prisoners throughout the war to further their aims, the UN had not. No post facto

Indian troops proved to be impartial custodians for POWs

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settlement could compensate the UN Command for the advantages which accrued to the enemy from this. Complete equity could have been achieved only through early recognition of the problem and a decision on the part of the UN Command to employ captured enemy personnel within the limit of their capabilities in pursuit of its war aims. Obviously, the UN Command could not have taken a decision to disregard the accepted rules of warfare in this respect, even if sufficient information of Communist practices upon which to base such a decision had been available during the first year.

Granting that it was too late to achieve a solution which was truly equitable as between the two belligerents, a feature of more nearly equal settlement would have been the extension of its provisions to the surviving remnants of the approximately 50,000 prisoners who had been incorporated into the Communist armies. In other words these, too, should have been delivered into the custody of the Repatriation Commission and afforded an opportunity to select their future, free from any coercion designed either to effect or prevent their repatriation. The enforcement of a provision such as this, however, would have required the prolongation of the war to the point of a decisive military victory, costing many thousands of lives on both sides.

In the war in Korea two widely different military traditions crossed. The Communists brought to this conflict the tradition of the Communist revolutions in Russia and in China, and their policy of the treatment of prisoners conformed with this tradition. The UN Command, on the other hand, brought to Korea the tradition of warfare between national states, and its treatment of prisoners was based upon the Geneva Convention which is a product of this tradition.

The Communists, having enjoyed throughout the hostilities the military advantages derived from the application of their own doctrine regarding the treatment of war prisoners, nevertheless sought at its end to effect the exchange of the prisoners on the basis of a literal interpretation of Article 118 of the Geneva Convention. To this the

UN Command could not agree, for it had been confronted by a situation which had scarcely been contemplated by that Article. That is, many of the prisoners refused to return to their homeland. Thus the UN Command was forced, in its policy respecting prisoners of war, to recognize a situation which is not a part of the tradition of warfare between national states but of the factional war of the Communists. The fact that neither side was able to impose its will upon the other in the Korean war created a near impasse on this problem. It is not

strange that its resolution took nearly 20 months.

The lessons for the future are clear. The Communists cannot change their policy on the treatment of prisoners of war so long as they remain Communists. In all wars in which they become engaged, even those whose predominant character is that of warfare between national states, the Communists will use prisoners to further their war aims. This consideration alone will dictate their policy on the treatment of prisoners of war. This should be understood

and appreciated now, not forgotten until we are reminded of it again after some new military contact with Communism, for it has an important bearing on our decisions.

By way of illustration, while the Communists in Korea were using the captured personnel of the UN forces to further their own aims and serve their own interests, the UN Command held in its custody, as POWs, approximately 150,000 captured personnel of the Communist armies. In terms of numbers this was about one-fourth the total of the UN forces. Many of these prisoners wanted to

DECISION NO. 90

MILITARY COMMITTEE, KOREAN DEMOCRATIC PEOPLE'S REPUBLIC

9 January 1953

ON TREATING ENEMY MILITARY WORKERS WHO COME OVER TO OUR SIDE INDIVIDUALLY OR COLLECTIVELY

The Korean people are today fighting against American and British imperialistic aggressors, their puppet Rhee Syngman gang and Japanese imperialism to protect the true unification, independence and freedom of their Fatherland, which has been a long cherished national dream. While this war of national liberation is going on, the aggression policies and horrible deceptive tactics of the enemy have been clearly exposed, and it has been proved that the wise Korean people cannot be deceived, and that no horrifying sword or gun or cruel police control can break the patriotic loyalty of the Korean people.

Truly, the lesson that the people have learned at the price of their blood in this great war of national liberation has aroused intense patriotism among the masses, enabled them to show a heroic spirit of sacrifice, and made them to see clearly that only the democratic countries headed by the Soviet Union and China are our real friends and the American, British and French imperialists are our enemies.

For this reason, the feeling of hostility and hatred toward the enemy is intensifying in the minds of the Korean people, their national consciousness is growing steadily, and even among the officers and men of the so-called "Defense Forces" enmity against the occupation forces and hatred toward the Rhee Syngman traitors are gradually gaining strength. The number is growing among them who realize that they are mere tools of American imperialistic aggression in Korea, and that they are, as cannon fodder for the enemy, committing the national crime of a fratricidal war.

Thus, some of them, either individually or collectively, are coming over to the bosom of the Korean Democratic People's Republic away from the terroristic massacre policies, all sorts of oppression, ill-treatment and suppression, and away from the humiliation and crime of participating in a war against their own Fatherland.

The Military Committee of the Korean Democratic People's Republic, considering such acts of desertion as a patriotic act for one's own fatherland and people, makes the following decision to open the way for salvation and happiness for these officers and men of the so-called "Defense Forces" who come over to our side:

1. No inquiry will be made into the past of, and all rights and freedom enjoyed by a citizen of this Republic will be given to, the officers and men of the enemy forces who come over individually or collectively to the Korean People's Army, the Chinese People's Volunteers or any government agency;

2. They will receive, individually or collectively, state decorations according to the extent of damage they caused upon the enemy, and those who brought with them arms or military equipments will be rewarded in accordance with prescribed regulations;

3. Those who wish to be incorporated into the Korean People's Army to fight against American imperialists and the Rhee Syngman gang will be given the privilege, permitting them to retain their former ranks in the "Defense Force," or promoting them to higher ranks in accordance with their services rendered. In case of a unit, it will not be dissolved, but will be incorporated into the People's Army, permitting them to retain their former ranks or with promotion.

4. In case they want gainful employment, they will be provided with jobs; to those who wish to be engaged in agriculture will be given land and other necessary conditions enabling them to carry out their wish; to those who wish to study will be given an opportunity to do so at state expense;

5. When they are accompanied by dependents, the latter will also receive the same considerations listed above.

6. Those former citizens of the Korean Democratic People's Republic who had gone over to the enemy side and have now come back will receive the same considerations listed above.

7. Those of foreign forces of aggression who came over to our side will receive special considerations.

Kim Il Sung
Chairman, Military Committee,
Korean Democratic People's Republic.
City of Pyongyang

HOW TO EAT CAKE

WARFARE BETWEEN NATIONAL STATES is governed by certain laws and established customs, among which are the provisions relating to the treatment of war prisoners expressed in the Geneva Convention. The Communists do not accept these rules. In Korea, however, the Communists tried to eat their cake and have it too. To understand this, one need only examine Decision No. 90 taken by the Military Committee of the North Korean regime in relation to the position taken by the Communists in the armistice talks at Panmunjom.

Decision No. 90 was propagated as a surrender leaflet. Both sides used such leaflets in the Korean War—showering them on enemy troops by airdrop or artillery shell. Leaflets used by the United Nations Command promised the enemy soldier who surrendered—shelter, food, kind treatment and relief from the hardships of war. In other words, he was promised that he would be treated in accordance with the Geneva Convention—no more, no less. Implicit in this appeal was recognition that prisoners would be exchanged at the end of hostilities in accordance with the Geneva Convention.

The Communists for their part approached the problem differently. They recognized no obligation to treat a soldier who surrendered as a prisoner of war—to hold him in a safe place until the end of the war when he would be free to return to his homeland. These principles of the Geneva Convention were inconsistent with Communist experience and incompatible with the Communist doctrine of warfare. Communist surrender leaflets reflected this different viewpoint. They contained extravagant promises of awards, bounties, high rank, free land, education and training. Such promises had little

fight alongside the UN soldiers, but they were not permitted to fight nor even to do work of a military character. At the same time they had to be guarded, fed, clothed, housed and cared for, and their maintenance constituted a severe drain upon resources which were needed to support the combat operations. *Can the free nations continue to handicap themselves in warfare with Communist nations by following, without question, all the rules on the treatment of prisoners laid down in the Geneva Convention? If the Communists are going to use captured*

personnel in combat and in work of a military character, can the free nations continue to hold captured personnel apart from the conflict? Can the free nations allow the Communist nations to enjoy the advantageous features of both of the two conflicting codes for the treatment of war prisoners when the corollary is that the free nations inherit the disadvantages of both?

To abandon the Geneva Convention, it will be argued, would increase the hazards to the soldiers of the free nations who fall into the hands of the Communists. Respect-

ing this observation, the question might well be asked, "Will it really?" The Soviet Union still holds many thousands of prisoners of war from WWII. The North Korean regime, Red China and, in all probability, the Soviet Union still hold many thousands of prisoners taken in violation not only of the Geneva Convention of 1949, but the express terms of the Korean armistice.

Does the Geneva Convention really afford any guarantees of protection to those who are so unfortunate as to fall into the power of the Communists as prisoners of war? USMC

AND HAVE IT TOO

effect upon UN soldiers, particularly the Koreans who knew the Communist too well. Few soldiers surrendered except those who had no choice. Those who did fall into Communist hands were disposed of with little regard for the provisions of the Geneva Convention. A captive might be killed or he might be dragooned into the "Peoples Army" as a "liberated private" or "awakened patriot," and forced back into the fighting on the Communist side. A relatively small number — of greater potential usefulness — may have received more favorable treatment. In short, a captive might be treated as a POW or he might not. Most were not, and even those who were classed as prisoners, were not treated in accordance with the detailed provisions of the Geneva Convention. Many were allowed to die as a result of neglect or maltreatment, while others were cruelly exploited for propaganda purposes.

A remarkable thing is the seeming lack of concern on the part of the Communists for consistency in their actions. Their spokesmen at Panmunjom had been demanding the repatriation of all POWs "in accordance with the provisions of the Geneva Convention" for more than a year when the Military Committee of the "Peoples Republic" enacted and publicized its Decision No. 90. This declaration at the highest governmental level confirmed that it was official Communist policy not to accord surrendered soldiers treatment as prisoners of war. Thus, while the Communists were insisting that the UNC accept a literal Communist interpretation of a provision of the Geneva Convention relating to repatriation; they themselves not only disregarded the existence of the Convention, but flagrantly publicized the fact. USMC

조선민주주의 인민공화국 군사위원회 결정 제 90 호

1953. 1. 1월 9일

개별적 또는 집체적으로 의거하여오는 적 군대 복무자들을 대우함에 관하여

오는 조선인민들은 민족적 속임인 전쟁한 조국의 통일학당과 자유를 보위하기 위하여 미영 제국주의 침략자들과 그 앞잡이 미승만도당 및 일본군주주의를 반대하여 겨우고 있다. 원수들의 모든 침략정책과 유흥한 기만술책들은 조국해방전쟁 과정에서 맹렬하게 죽고 피었고, 지하스러운 조선인민을 기만할수 없다는것이 증명되었으며 원수들의 그 어떤 후복한 증정과 관용으로 경찰통치도 조선인민의 애국적 충성심을 강하게 뛰어난다는것이 실증되었다. 서로 위대한 조국해방전쟁의 거령한 퍼의 고훈은 강렬한 인민들에게 보르의 애국적 자각을 한기시키고 영웅적 혁신성을 발휘케 하였으나 뜨거운 성부로인 중국 및 청색 민주주의 국가들만이 우리와 전우이며 미 일 분동 세국주의자들이 우리와 전우이라는것을 확실히 보여주었다. 그렇기때문에 전체 조선인민들이 원수에비한 살라는 적개심과 중요감을 더욱 높아지고 그들의 민족적 자각은 날이갈수록 강성하여 가파있으며 소위『국방군』장병들속에서도 이제 강경자들에비한 만감과 비승한 반역도당들에비한 중요감은 점차 저하자되어가고있다. 그들중에는 자기들이 미제의 조선침략의 도구에 살과마저 숨을의 떠오르기로써 동족상생의 민족적 희약을 범하고있다는것은 차라리 자들의 수호가 중앙화되고있다.

이미하여 그들을비는 미제 강경자들과 비승한 반역도당들의 태도 타율정책과 온갖 반대와

행복과 억압을 반대하며 자기조국을 반역하는 행정에 가담하는 수치와 죄악을 반대하여 서

벌써 또는 집체적으로 조선민주주의 인민공화국의 충성으로 의거하여오고있다.

조선민주주의 인민공화국 군사위원회는 이러한 의거자들의 활동을 자기 조국과 자기 민족을 위한 애국적 행동으로 평가하면서 의거하여 오는 소위『국방군』장교 및 병사들에게 구원과

행복의 길을 열어주기위하여 다음과같이 결정된다

1. 조선인민군: 중국인민지원군 및 기타 일체 국가기관에 개별적 또는 집체적으로 의거하여 오는 적군 장병들에게 과거를 추궁하지 않으며 공화국의 공민으로서의 권리와 자유를 부여한다.

2. 의거자들이 적에게 손실을 준 개별적인 군공과 경제적인 위훈에 대하여 그 공훈의 정도에 따라 국가보장을 수여하여 무기 기타 군수기재를 허용하고은 자들에게는 각각 소정상금을 수여한다.

3. 의거자들이 미제와 미승만도당을 반대하여 조선인민군에 전입되어 죄을 것을 회망할 당시에는 전『국방군』의 직급대로 인민군 계급을 수여하거나 공로에따라 승급시켜 조선인민군 해당 병종에 전입시킨다. 경제적 의거부대분에 대하여서는 그 부대를 해산시키지 않고 전『국방군』의 직급대로 인민군 계급을 수여하든가 승급시켜 내우하는 동시에 인민군에 전입시킨다.

4. 의거자들이 적장을 회망할 당시에는 적당한 적장을 할선하여주며 농업을 회망하는 자에게는 토지 및 농업에 종사할수있는 재 조건들을 해결하여주어 배울을 요구하는 자에게는 회망하는 해당학교에 입학시키며 국비로써 공부시킨다.

5. 의거자들이 가족을 인솔하여 왔을시에는 그 가족들에게 대하여서도 이상 제 조항을 동일하게 적용한다.

6. 조선민주주의 인민공화국 공민으로서 적편에 넘어간 자를로서도 의거할시에는 이상 조항들을 동일하게 적용한다.

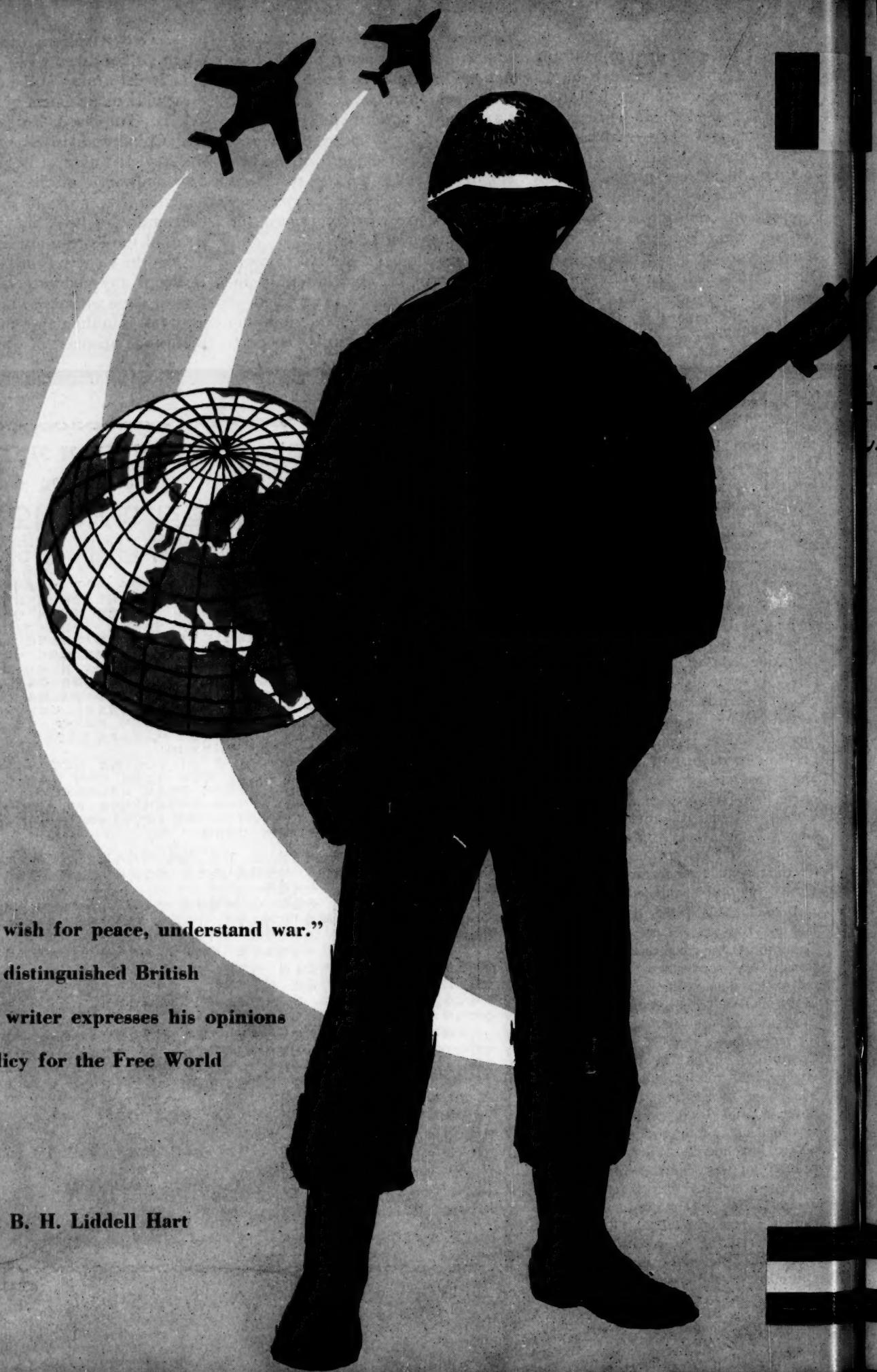
7. 외래 침략군에 성전중 의거하여 온 자들에게는 특별한 대우를 부여한다.

조선민주주의 인민공화국 군사위원회

위원장 김 일 성

개양사

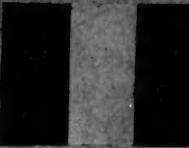
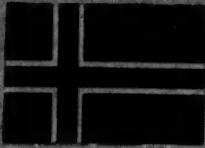
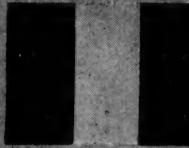
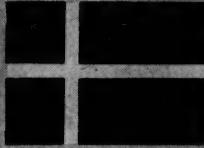
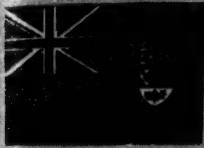
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"If you wish for peace, understand war."

**... the distinguished British
military writer expresses his opinions
on a policy for the Free World**

By Capt B. H. Liddell Hart



DEFENSE of the FREE WORLD

THE ROMANS COINED THE maxim: "If you wish for peace, prepare for war." But the many wars they fought, and the endless series since their day, show that there was a fallacy in the argument—or that it was too simply put, without sufficient thought. As Calvin Coolidge caustically remarked, after World War I: "No nation ever had an army large enough to guarantee it against attack in time of peace or insure its victory in time of war."

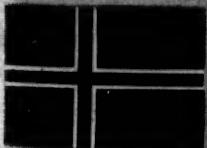
In studying how wars have broken out I was led to suggest, over 20 years ago, that a truer maxim would be: "If you wish for peace, understand war." That conclusion has been reinforced by World War II and its sequel. It signposts a road to peace that is more hopeful than building-plans—which have so often proved "castles in the air."

Any "Plan" for peace is apt to be not only futile but dangerous. Like most planning, unless of a mainly material kind, it breaks down through disregard of human nature. Worse still, the higher the hopes that are built on such a plan, the more likely that their collapse may precipitate war.

There is no panacea for peace that can be written out in a formula like a doctor's prescription. But one can set down a series of practical points—elementary principles drawn from the sum of human experience in all times. Study war; and learn from its history. Keep strong, if possible. In any case, keep cool. Have unlimited patience. Never corner an opponent, and always assist him to save his face. Put yourself in his shoes—so as to see things through his eyes. Avoid self-righteousness like the devil—nothing is so self-blinding. Cure yourself of two commonly fatal delusions—the idea of "victory" and the idea that war cannot be limited.

These points were all made, explicitly or implicitly, in the earliest known book on the problems of war and peace—Sun Tzu's, about 500 BC. The many wars, mostly futile, that have occurred since then show how little the nations have learned from history. But the lesson has been more deeply engraved. And now, with the development of the H-bomb, the only hope of survival, for either side, rests on careful maintenance of these 8 pillars of policy.

It may appear strange that the first point of advice for preserving peace should be to study war. But there is no better cure for an inclination toward, and belief in, forcible solutions—provided that such study goes far enough. That has certainly been my own experience. I was not cured by going through WWI, and at the end of it I still remained a keen soldier, while during the immediate postwar years I was active in evolving the new methods of armored attack, intended for British use, that were later adopted all too successfully by the Germans for their Blitzkrieg of WWII. But by the 1930s longer and deeper study brought a clearer view of war—and with it I came to see that such a new solution of the defense-cracking problem was not well-fitted to the needs of peacefully inclined countries, naturally sluggish in arming, like ours. I then sought to evolve a counter to the new form of attack. This would have effectively nullified the Blitzkrieg (and did so later in the war) but it was not applied in 1940. The British and French leaders had not yet come to understand the new attack method evolved in



the 1920s — as Sir Winston Churchill himself frankly admits in the first and second volumes of his memoirs.

It is necessary to recall these facts from the recent past since they help to make clear one essential part in "understanding war," and also because they have an important bearing on the solution of our present defense problem.

But there is much more, beyond this, to be learned from extending the study of war and the evidence of history. It becomes clear that the surest way to prevent war is to avoid taking steps that, in experience, have precipitated it. Although this may be called a "negative course," it is a form of negative that leads to positive benefit. For it keeps clear of courses that cause fatal accidents, while keeping the road open for the normal "traffic" between nations which promotes peaceful relations.

On examination it can be seen that most wars were avoidable. Also, that the actual outbreak was in many cases produced through the more peacefully inclined side losing its head, or its patience, and putting an otherwise calculating opponent in a situation where he could not draw back without losing "face."

To limit the danger of war, unlimited patience is needed. That is not easy for the statesmen of the Western democracies, especially those who are by temperament eager for quick solutions. Even where the statesmen realize the necessity, they are under pressure from an emotional electorate. At the same time patience is extraordinarily strained in dealing with Oriental statesmen who are under no such pressure, and are accustomed to spinning out time. Yet as Sir Anthony Eden has wisely remarked, and Sir Winston Churchill emphasized: "To jaw-jaw is always better than to war-war."

It would be less strain on the statesmen and safer for all concerned if it could be arranged for them to be represented by tame parrots, or gramophone records, as their deputies. But in the absence of such an arrangement, the rising generation of statesmen should be trained to develop endless endurance in "jaw-jaw." For the alternative, a "show-down," can all too easily be suicidal in the H-bomb age.

There is a widespread feeling in

the West that no "settlement" is possible, or likely to last, with the Communist regimes of Russia and China — and that these will continue to grab more gains wherever they can. That feeling has much justification in experience and in knowledge of totalitarian trends. But the more right it is, the more vital that Western statesmen, in taking countermeasures, should bear in mind a long-standing lesson of police experience — that "a burglar doesn't commit murder unless he is cornered." This is also true of the community of nations.

It is courting danger, also, to attempt political countermeasures that are beyond our strategical capacity. A tragic example of that folly was the British "guarantee" to Poland offered by Mr Chamberlain in 1939. Suddenly reversing his policy of appeasement, it combined provocation with temptation. It was a challenge to Hitler, which no one of his temper was likely to swallow, while the manifest strategic impossibility of Britain and France giving effective aid to a country so strategically remote as Poland naturally tempted him to demonstrate the unreality of the guarantee. We now know, from the captured German records, that Hitler had no intention of tackling Poland in 1939 and only decided to do so *after* Chamberlain's offer to support her. It acted like throwing down a gauntlet, or waving the proverbial red flag in the face of a bull. So the unfulfillable promise merely ensured that war would come at the time and in the circumstances most disadvantageous for us.

Western statesmen should have learned from costly experience that it is folly to bluff on a manifestly weak hand. Yet recent crises in the Far East have seen repetitions of that "unstrategic" political tendency.

Another lesson of strategy, which should be a pillar of policy, is the importance of putting ourselves in the other's shoes and looking at every step from the other side's standpoint *before* we take the step. To minimize the risks of precipitating war while we are developing our power of defense, we should endeavor to understand Communism-Russian mentality. That requires a realization not only of its Marxist logic, missionary fervor, revolution-

ary ferment and power urge; but also its underlying fears, its intense suspiciousness and ignorance of the outer world — characteristics that have been accentuated by long isolation as well as by the governmental system. The same applies, with certain differences, to Red China.

Taking account of these mental conditions and viewing the strategical situation from "the other side of the hill," we may be better able to understand how steps, and which steps, on our part that are intended as defensive safeguards are liable to appear as designed to gain offensive springboards. The protective spread of American bases in the Middle East and Far East may, naturally, look from the other side like a ring of such springboards being pushed in close to the vital centers of Russia and China — thus producing, in reaction, a sharpened impulse to push them further away by expanding the area of Communist control.

Here we are brought to the great and grave problems arising from the development, successively, of the atomic and the hydrogen bombs.

The hydrogen bomb is not the answer to the Western peoples' dream of full and final insurance of their security. It is not a "cure-all" for the dangers that beset them. While it has increased their striking power it has sharpened their anxiety and sense of insecurity.

That is an ironical reflection on the hasty and thoughtless way in which their leaders agreed in 1945 to unloose the atomic "Frankenstein's monster" in order to hasten Japan's collapse. The most startlingly significant revelation in the final volume of Sir Winston Churchill's war memoirs, aptly entitled *Triumph and Tragedy*, is his statement that "there never was a moment's discussion as to whether the atomic bomb should be used or not."

The H-bomb might be regarded as retribution for Hiroshima — a "trigger-release" which looked to the responsible statesmen so easy and simple a way of assuring a quickly complete victory and subsequent world peace. Their thought, Sir Winston Churchill says, was that: "to bring the war to an end, to give peace to the world, to lay healing hands upon its tortured peoples by a manifestation of overwhelming

power at the cost of a few explosions, seemed, after all our toils and perils, a miracle of deliverance." But the anxious state of the peoples of the Free World today is a manifestation that their leaders failed to think through the problem—of attaining peace through such a victory.

They did not look beyond the immediate strategic aim of "winning the war," and were content to assume that military victory would assure peace—an assumption contrary to the general experience of history. The outcome has been the latest of many lessons that pure military strategy needs to be guided by the longer and wider view from the higher plane of "grand strategy."

While strategy runs contrary to morality, being purely concerned with the application of force and deception, grand strategy tends to coincide with morality—since it requires a farsighted regard for the ultimate state of peace.

In the circumstances of WWII, the pursuit of triumph was foredoomed to turn into tragedy and futility. A complete overthrow of Germany's power of resistance was bound to clear the way for Soviet Russia's domination of the Eurasian continent and for a vast extension of Communist power in all directions. It was equally natural that the striking demonstration of atomic weapons with which the war closed should be followed by Russia's development of similar weapons.

No peace ever brought so little security, and after 10 nerve-racking years the production of thermonuclear weapons has deepened the "victorious" peoples' sense of insecurity. But that isn't the only effect.

The H-bomb, even in its trial explosions, has done more than anything else to make plain the nonsense of "total war" as a method and "victory" as a war-aim. They are out-of-date concepts.

That has come to be recognized by the chief exponents of strategic bombing. Marshal of the RAF, Sir John Slessor, recently declared his belief that "total war as we have known it in the past 40 years is a thing of the past . . . a world war in this day and age would be general suicide and the end of civilization as we know it." Marshal of the

RAF, Lord Tedder, earlier emphasized the same point as "an accurate, cold statement of the actual possibilities," and said: "A contest using the atomic weapon would be no duel, but rather mutual suicide."

Less logically, he added: "that is scarcely a prospect to encourage aggression." For a cold-blooded aggressor may count on his opponents' natural reluctance to commit suicide—as an immediate response to a threat that is not clearly fatal.

In view of what the air chiefs themselves have told us, it is evidence of "unsound mind" on our part to contemplate taking the lead in using such weapons. Moreover, the trust which the statesmen place in the possession of the H-bomb as a deterrent may be another of their illusions. For the threat to use this trump card may be regarded in

Moscow and Pekin as a bluff. Indeed, it may be taken less seriously there than in countries on the near side of the Iron Curtain whose people are perilously close to Russia and her strategic bombing forces. Its back-blast in such countries has already been very damaging.

It may be necessary to have H-bombs and be able to deliver them if the Russians should try to do so. But it is unlikely that a cool-headed enemy will initiate "mutual suicide" with these weapons and far more likely that he will pursue the subtler and more restrained kind of aggressive action that has come to be called "cold war." (It is more accurately described by the long-established term "limited war.") Moreover, he may exploit a variety of techniques, differing in pattern but all designed to make headway while

WHAT CLAUSEWITZ MEANT

General Karl von Clausewitz (1780-1831), who is to military strategy what Adam Smith is to economics or Isaac Newton to physics, has been rarely read, more rarely understood, but abundantly quoted.

Unfortunately he was a follower of Hegel's method of presenting thesis, then antithesis, followed by synthesis, where the balanced conclusions are put forward. In his monumental work ON WAR, he first describes war in theory as subject to no limitations of violence, only to develop immediately thereafter the opposite point that qualifications in practice must check the theoretical absolute.

"War is an act of force and to the application of that force there is no limit," he declares. Also: "In affairs so dangerous as war, false ideas proceeding from kindness of heart are precisely the worst. . . . He who uses force ruthlessly, shrinking from no amount of bloodshed, must gain an advantage if his adversary does not do the same. . . . Never in the philosophy of war itself can we introduce a modifying principle without committing an absurdity." These and like remarks have been quoted (and not by the Germans alone) as a justification for absolute violence in war.

Yet Clausewitz takes pains to show that the above remarks apply only in a kind of theory which has no place in the real world. "War is never an isolated act" is one of his subheadings. If war were followed to its logical but absurd extreme of absolute violence, "the result would be a futile expenditure of strength which would be bound to find a restriction in other principles of statesmanship." This leads him directly to his most famous and most misunderstood remark of all: "War is a mere continuation of policy by other means."

The meaning of this famous statement becomes clear if we read the seldom-quoted sentences that precede it: "Now if we reflect that war has its origin in a political object, we see that this first motive, which called it into existence, naturally remains the first and highest consideration to be regarded in its conduct. . . . Policy, therefore, will permeate the whole action of war and exercise a continual influence upon it, so far as the nature of the explosive forces in it allow." This is in fact the leading idea of the whole work, and to it Clausewitz returns again and again.

It is also the theme that governs the meaning of his famous definition of the object of war as being "to impose our will on the enemy." He indicated that the "will" must have reasonable limits: "If our opponent is to do our will, we must put him in a position more disadvantageous to him than the sacrifice would be that we demand."

In other words, according to Clausewitz, a defeated enemy, far from having unconditionally surrendered his will, must have a will of his own.

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causing hesitancy about employing, and difficulty in applying, atomic counteraction.

The aggression might be at limited tempo—a gradual process of encroachment. It might be of limited depth but fast tempo—small bites quickly made, and as quickly followed by "offers" to negotiate. It might be of limited density—a multiple infiltration by particles so small that they form an intangible vapor.

It is folly to put most of our effort and resources into preparation for what is not probable, at the sacrifice of what is needed to meet the kind of aggressive action that is likely.

So long as official spokesmen continue to talk about their intention to use H-bombs or A-bombs in an unlimited way if "war" should come, they will continue to undermine the Western peoples' will to resist, and foster the growth and spread of the apathy about defense that is becoming increasingly plain. For the common people have the common sense to realize that defense by methods likely to spell "suicide" is no defense, in terms of reality.

Nor is apathy the only danger. Faced with the prospect of mutual "atomization" if war should break out, the peoples of Western Europe, and Asia may become more inclined to the alternative of turning Communist peacefully, or of nonresisting surrender. It is strange that the leaders of the West do not see that a form of defense that spells *suicide* makes no sense. It is stranger still that they do not realize the boomerang effect of implying such a policy and strategy as being inevitable.

These considerations at least require the fullest effort to think out and produce a better method of defense. It is folly to rely on wholesale devastation and extermination as our first line of defense, and to contemplate using it as an answer to any less-than-vital threat.

For the individual members of NATO, only their own region is really *vital*. To check Communist expansion in the Middle East and further east is important for their interests, but not truly vital.

Moreover, the situation in these Asiatic regions is unlikely to provide a clear-cut test of aggression—owing to the current anti-European feeling

in certain areas and other factors, political and economic.

While it is highly desirable to preserve these Asiatic regions from Communist domination, it would be folly to pursue this aim by action likely to prove fatal to the Western countries themselves, i.e., precipitating all-out war with H-bombs.

So long as there is thought and talk of taking such a course, there will be growing hesitation in the Western countries, and still more in Asiatic countries, about taking a firm stand against aggression. Thus on every ground it is essential, and urgent, to evolve a policy and strategy of defense that are not *dependent* on such suicidal means.

Any cold-blooded planners of aggression tend to be calculating, and less emotional in their reactions, than their victims and opponents. That provides a safety-check of which our strategy should take account. Even though an all-out duel with H-bombs might not be so fatal to Russia or China as it would be to the countries of Western Europe, more centralized and civilized, the "ice-cold" minds in the Kremlin are unlikely to initiate such a devastating duel so long as the West possesses the power to reply in kind.

Neither side can reckon on being able to cripple the other's retaliatory power at a stroke as Japan could with the US battle fleet at Pearl Harbor, since airfields from which H-bombers might take off are too numerous and widely spread. To reckon on crippling the menace at the outset would be almost as vain as finding the proverbial "needle in a haystack." Indeed, it is astonishing that some of the Western air chiefs seem to put faith in such a dubious chance and are inclined to stake the survival of civilization upon it. But although some Western governments might be emotionally jerked into such a course under pressure of a Communist invasion, it is not likely that cool-headed planners in the Kremlin would base *their* strategy on any such long-odds gamble.

A better prospect of checking a Communist invasion lies in using *tactical* atomic weapons against the actual invading forces (including possibly, though not necessarily, the near ends of their supply arteries).

The best chance of being able to use such weapons without precipitating all-out warfare would be to make it clear beforehand that we do not intend to start a general "atomization" of cities and devastation of countries if the other side abstains.

An open declaration or pledge to this effect might carry the disadvantage of diminishing the restraint on lesser forms of aggression. But, what is more vital, it would help to reassure the people of Western Europe and Asia that there is a way of resistance to aggression that does not entail "H-bomb suicide"—and thus counteract their palpably increasing hesitation to oppose Communist aggression. Every speech or statement that discounts or disparages the practice and possibility of "limitation in warfare" tends, in the H-bomb age, to weaken the spirit of resistance.

If it is not considered possible to draw a line between the tactical and the unlimited use of the new weapons, it would be wiser, on balance, to discard tactical atomic weapons. The risks of such a discard would not equal certain suicide involved in all-out war with H-bombs. Indeed, the experience of the last war, when analyzed, provides very encouraging evidence that the present scale of the NATO forces, if they are remodelled in the light of that experience, and reinforced by the Germans, should be capable of withstanding a mass invasion of the vital area of Western Europe.

In Normandy, analysis shows that Allied attacks rarely succeeded unless the attacking forces had a superiority of *more than 5 to 1* on the ground, accompanied by domination of the air. On the Russian front, where such complete command of the air was lacking, defense repeatedly succeeded against even greater ground odds—7 to 1 or more—except when and where the front was too wide for the defender to ensure the necessary minimum density of the fire network.

A grasp of what these facts mean provides a new outlook that is far more hopeful than the so-called "New Look" strategy, formulated and announced early last year, of relying on "massive retaliatory power." That new-sounding name merely covered the reversion to an old

mode regardless of the fact that Russia had developed both A-bombs and H-bombs in the meantime, and thus also became capable of such "massive retaliatory" action.

It is worse than foolish to plan defense on a basis that means committing suicide—and even more absurd to think of doing so in reply to any local aggression.

Moreover, a massive Russian invasion can be reckoned as the least probable contingency in the present situation. As the Russians did not attempt it during the years when their armies could have overrun Western Europe with little hindrance, and when the deterrent of atomic retaliation was at its minimum, it becomes much less likely that they will embark on it now. Far more likely is a continuance of local and limited aggression—carried out by satellites and conducted on guerrilla-type lines.

In concentrating on defense against "frontal" assault, the Western powers have been slow to recognize, and prepare to meet, their opponents' shift to "outflanking" moves—on the plane of grand strategy. With a clearer realization of the balance of probability, and a redistribution of their resources accordingly, the Western powers could attain a greater state of readiness to meet and check this *erosive* action.

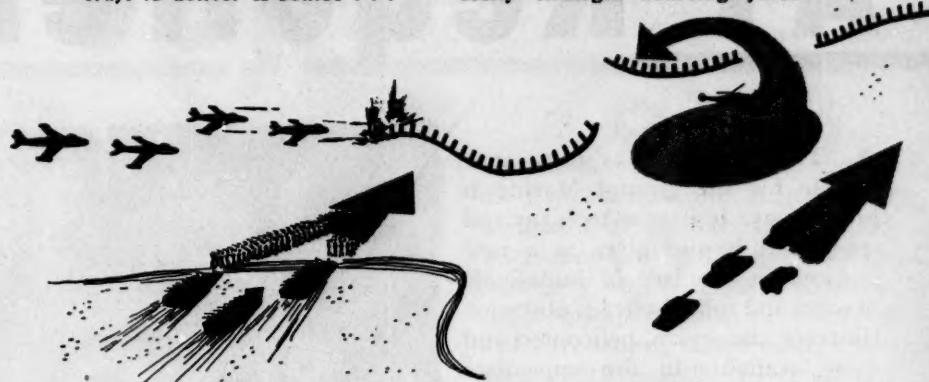
The H-bomb was hailed as "The Great Deterrent"—to aggression and war. That idea was a blend of truth and fallacy. The H-bomb is a "Great Deterrent"—i.e., to great-scale aggression and thus to another "great war." But it is not a suitable or effective deterrent to small-scale aggression and small wars. A clear grasp of this fact points the way to a suitable redistribution of our resources and remodelling of our forces.

For the continued provision of the "Great Deterrent" a relatively small number of super-performance aircraft should suffice to ensure the possibility of delivering enough H-bombs to destroy the vital centers of any country. Thus a great strategic bombing force of the ordinary kind becomes obsolete and superfluous, since in a small war it would be impossible to attempt air operations deep behind the other side's frontiers without grave risk of blowing it up into a great war, and of precipi-



A few super-performance aircraft to deliver H-bombs . . .

. . . negates the need for a great, costly strategic bombing force



. . . while more economical, highly mobile, "fire brigade" combat teams, supported by tactical air, can handle local aggressions

tating the instantaneous dispatch of H-bombers from that side. Besides the reduction of this "superfluous fat" in the air force, there should also be scope elsewhere for saving much of what is at present being devoted to preparation for another great war on familiar lines—now a most unlikely contingency.

With the money, manpower and other resources that we could thereby save, we should be in a far better position than ever before to tackle small wars and extinguish local outbreaks of aggression that occur in various parts of the world—the problem that has hitherto baffled us, and is insoluble as things stand. Superior quality and rapidity are the key requirements, militarily, in dealing with such outbreaks—not mass and slow-motion. Short-service conscripts tend to be a useless encumbrance and a sitting target. What we need are strategic "fire-brigade" forces of high mobility and highly trained skill. They should be airborne, so that they can be quickly switched anywhere that an outbreak occurs. They should be given ample tactical air support of a suitable kind and means of air supply wherever it can be advantageous. They should be organized in small composite combat teams of a handy and very flexible kind, so that they can grapple with guerrillas or strike like a swarm of gnats against larger in-

vading bodies. Light armored fighting vehicles of high cross-country maneuverability would be a valuable form of equipment—but not cumbrous 50-ton tanks. The helicopter should be developed to the fullest possible extent for such forces. With such a pattern the prospects of quenching the new Communist strategy of "small aggressions" could be greatly increased.

The strength required for security in these conditions will more certainly be attainable when our late enemies, now allies, are rearmed. The supreme irony of our present precarious situation is that we could be already secure if they had not been disarmed under the conditions of peace that we imposed.

The fact shows the short-sightedness of the "total victory" aim and "unconditional surrender" policy that we pursued. The idea of keeping major nations disarmed in an armed world was a freak of fancy—born of an emotional urge that was not controlled by awareness of the complex problem of bringing peace out of war. No statesmen who understood statecraft ever tried to disarm a defeated opponent completely. For the natural result of creating such a vacuum is to dislocate the international balance, so that former allies became rivals for power in the vacuum, and easily turn into enemies.

USMC

If we are to build an assault force around
the helicopter lift, consideration must be given to

AT Requirements

THE HELICOPTER AS AN ASSAULT vehicle for the ground Marine is here to stay. It gives us mobility and speed and it also gives us a new freedom in the face of impassable beaches and inland terrain obstacles. However, the present helicopters and those available in the immediate future, impose weight limitations which eliminate extra-heavy lifts. We feel this restriction most keenly when we have to leave our tanks behind.

The Marine rifleman feels this loss when he must assault a heavily defended position which he has been trained to take as a part of the tank-infantry team. The Marine ground commander feels very much alone in the face of an enemy armored attack when he has no tanks to assist him. The commander is well aware of the old adage that "the best defense against a tank is another tank." However, he knows that even the light tank is too heavy for our helicopters to lift.

On answer to this problem is to land the tanks across the beaches to link-up with the helicopter-landed infantry and artillery. This answer is acceptable in some situations, but it limits the depth to which the helicopter-borne force may penetrate and does not exploit the full capabilities of our helicopters. If we are to build an assault force around the helicopter lift, we must be able to seize critical terrain without regard to beaches or terrain obstacles. Furthermore, we must be able to defend ourselves against all enemy counter-attacks including armor.

In the solution of this problem we have 2 possible courses of action: 1) we must build helicopters capable of lifting our tanks, or 2) we must devise a system of defense against



tanks—a system that can be transported by helicopter. Let's analyze the first course of action.

Our present helicopter has a payload of 1,800 lbs or 6 men and their equipment. The new helicopter, soon to be available, has a much higher designed payload. The Army has specified a design payload of 16,000 pounds for a troop and cargo helicopter. Against these lifts we must balance the weight of our organic tank (M48) of approximately 100,000 lbs. It should be possible to design and build a flying-crane which would have the capacity to lift a tank, but the cost in terms of space to transport these craft to the objective area plus logistical support in fuel and maintenance indicates that we should carefully examine our second course of action before we commit ourselves.

Our second course of action is to

plan an antitank defense which can be transported by helicopter or is readily available to the commander of the helicopter assault force.

The essential elements of such a defense are either presently available or are in the test stage. Before discussing the components of this weapons system, let's consider the requirements for a defense against an armored attack. There are 4 main requirements:

- 1) Defensible terrain
- 2) A warning system
- 3) Long-range antitank weapons
- 4) Short-range antitank weapons.

The first of these requirements appears to be the key to the antitank defense of the helicopter-borne assault force.

To compensate for the lack of armor protection and long-range accurate hitting power of the tank, the operational planner must select ob-



s Heliotroops

jectives that are inherently strong defensive positions. He must look for natural obstacles that will channelize the armored routes of approach into our beachhead or defensive area, and he must make the maximum use of terrain for the defense of these obstacles. Since our assault forces will probably be dispersed into battalion combat groups for passive protection against enemy atomic weapons, this will require an intensive analysis of the terrain.

Among the terrain features most attractive to the planner for such objectives will be dominating ground offering natural facilities for concealment and overlooking obstacles such as swamps, unfordable streams, steep hills and narrow defiles. Ideally, these potential objectives should have obstacles to their rear and on their flanks to facilitate all-around defense. Observation in all directions is very desirable, but this observation can be supplemented by aerial observation provided by all-weather reconnaissance helicopters and all-weather reconnaissance planes. Line-of-sight observation over the principal routes of approach into these positions is essential for the employment of the ground defense radars which will be discussed later.

Since no obstacle is a defense in itself, the commanders of the battalion combat groups must take affirmative measures to utilize them. Obstacles must be improved by the addition of mines, booby traps and impediments to free movement by tanks. When these obstacles cannot be observed at all times from the main battle position, patrols and combat outposts must be provided to extend the commander's range of observation. Furthermore, these ob-

stacles must be covered by fire at all times lest they become our Achilles heel.

Once we have seized these inherently strong objectives, we must provide for a warning system which will warn us of the approach of enemy armor and will enable us to attack concentrations of enemy tanks before they can close with our ground elements. The means for the long-range search for the destruction of enemy tanks is available to us in our all-weather reconnaissance aircraft provided by the air groups of our Marine air-ground team.

To give us the warning we require, these all-weather reconnaissance aircraft must be exploited to the limit of our tactical and technological knowledge. Tactically, the requirement is on the ground intelligence and operations officers. They must request reconnaissance missions to cover all potential tank routes of approach to our beachhead. They are responsible for the briefing of the reconnaissance aircraft crews, to include all known and suspected concentrations of enemy tanks which threaten our position and to keep air operations informed of any new information of enemy tank movements as soon as such information is received. Technologically, our all-weather reconnaissance planes must be equipped with the latest ground search equipment such as moving target and present-position indicators, infra-red observation and photographic devices.

Close-in all-weather reconnaissance and warning will be provided by re-

connaissance helicopters to bridge the gap between the longer range fixed-wing aircraft and the ground observation provided by the battalion combat groups. These reconnaissance helicopters must be equipped with electronic devices to make them effective under all conditions of visibility. Many of the same devices used in our all-weather reconnaissance planes will help to increase their effectiveness. Because these helicopters would operate relatively close to our most forward battle positions, their reports would have a greater urgency than would the reports of the deep reconnaissance elements. This need could be met by equipping the reconnaissance helicopters with radios which could operate in designated battalion command nets.

The innermost link in our warning system would be the patrols, combat outposts and forward elements of the battalion defensive positions. The approach of enemy tanks to these close-in elements would set the final condition in our plan of antimechanized defense.

Having chosen strong defensive positions for our ground elements and having established an all-weather warning system, we must now establish how we will defend ourselves against the tank threat. Let's parallel our discussion of the warning system by starting with concentrations of enemy tanks well beyond our beachhead.

Large armored formations are very hard to hide, so despite good camouflage discipline on the part of an enemy, we should have a relatively good chance of locating such forces. Once they are located, they must be kept under constant surveillance until an attack can be planned and

executed. Since safety of our own troops will not be a factor in the case of deep targets, it is probable that we would employ atomic weapons against this target.

We know that nominal atomic weapons have a relatively small radius of effect against tanks and armored vehicles. However, the importance of the target might impel us to plan the use of more than one atomic bomb against a large tank assembly area or we might use a larger atomic bomb to give a larger radius of effect. We know that the enemy will have his armored vehicles dispersed as a means of passive protection against our weapons, but it is quite probable that the crews who man these tanks will not be inside nor will they be buttoned-up. Therefore, we can expect to inflict a large number of casualties on the tank crews. Furthermore, the radius of effect of the weapons against personnel will be much larger than the radius against the vehicles themselves. If the target is a tank regiment or a relatively large combat command, we would probably follow up our atomic attack with HE, napalm and strafing to increase the amount of damage and to prevent the enemy from executing damage control measures.

If the enemy does not have large armored formations available in the objective area, or if he utilizes his armor in small packets in support of infantry, it is probable that we will not discover the bulk of his armor before it reaches our close-in reconnaissance zone. We must expect the enemy to attempt infiltration measures to build up a counterattack force in close contact with our ground elements so they will not be exposed to atomic attack during the approach phase. However, we should be able to discover the majority of these infiltrating units even under conditions of reduced visibility. Our attacks against them will be a combination of all weapons that have the range to reach the infiltrating tanks and infantry. If we are close enough to the beach for naval gunfire to be effective, it will be added to the heavy support weapons of the ground elements. It is probable that we will depend again on our close support aircraft for the majority of the antitank attacks.



Requirements are that it be light enough to be airtransportable . . .

Marine close support attack planes have proved their effectiveness against enemy tanks in the past employing standard aircraft rockets and napalm. Their effectiveness can be improved by increasing the training syllabus for targets of this type and by the standardization and production of target-seeking rockets which will home on heat generated by the tank exhaust. Since the helicopter-borne assault force will depend on close air support to a large degree, the training of the pilots for attacking such targets will be emphasized. The development of suitable rockets will have to be accelerated to provide the required armament for the planes.

Experience teaches us that despite our long range intermediate warning and attack systems, some tanks will get through to attack our ground positions. It is against these tanks that we have always felt that the best defense is another tank. What are the characteristics of the tank that have made it the best weapon in this field? Major characteristics are its long-range accurate gun which can penetrate opposing tank armor, the protection afforded

its crew by its armor and its mobility to meet attack from any direction. What replacements are there for these valuable traits?

It is possible to utilize the gun without the heavy chassis and armor of the tank which we cannot carry by helicopter. One solution would be the employment of towed anti-tank guns of a conventional pattern to bring them within our lift capabilities. However, these guns are not mobile enough for all-around defense and their weight is still a big factor. The answer appears to lie in lighter weapons employed in greater numbers.

The 106 mm recoilless rifle is one available weapon which we can use. Its relatively light weight and reasonable accuracy, plus its low silhouette, fills part of our need. It does not have the range which we would like, but in defensive terrain it is likely that restricted avenues of approach and limited visibility will be the rule so that long range will not be so important. It is likely that we will employ the 106 mm in far greater numbers in the helicopter assault than we do our present anti-tank weapons. Depending upon the

number of tank routes of approach into the selected positions and our estimates of enemy armor in the objective area, it would appear that a 6-gun platoon per rifle company might be required. (This 106 mm gun platoon would not be designed for antitank defense alone; it would be an important asset in the assault of the isolated defenses which survive our preparatory fires.)

This system of warning and attack should reduce the number of enemy tanks that finally reach the defensive positions of our infantry to a small number supported by enemy infantry. The destruction of these tanks will require the integrated employment of all of our close defense weapons. The rocket launcher will be invaluable as it is today, but all weapons must be employed to cripple these tanks. Smoke grenades should be employed to blind the tank at close ranges, magnetic mines must be available for use in conjunction with the smoke, pressure mines that will be effective when thrown in front of the tanks must be available, small shaped charges should be utilized, flame throwers can be used—in fact, every weapon must be brought to bear that can slow down, damage and finally destroy the tank and its crew. Furthermore, every unit in the Marine division, including logistical installations, must be equipped and trained for this in-fighting.

The technique of this close-in antitank defense is not new, nor are the weapons employed new. The important point is that training and planning must emphasize the immediate action by every individual to join in this fight. Individual Marines have done this in every battle with tanks, but he can be many times as effective if he is taught where the tank is most vulnerable, what its blind spots are and how to use the means available to exploit that knowledge. All that remains for the planners to do is to select the best terrain for such a defense and make available the means.

One additional weapon for the close-in protection against tanks should be mentioned—the antitank mine. The helicopter assault force must make liberal use of antitank mines to restrict the mobility of the

tanks which reach the defensive areas. The number of mines required will not be beyond the capability of the force to lift and emplace if the terrain is selected properly. The doctrine of covering mine fields by observation and fire will be as valid as it has been in the past. Here again, planning and training must emphasize the use of the means we have at hand.

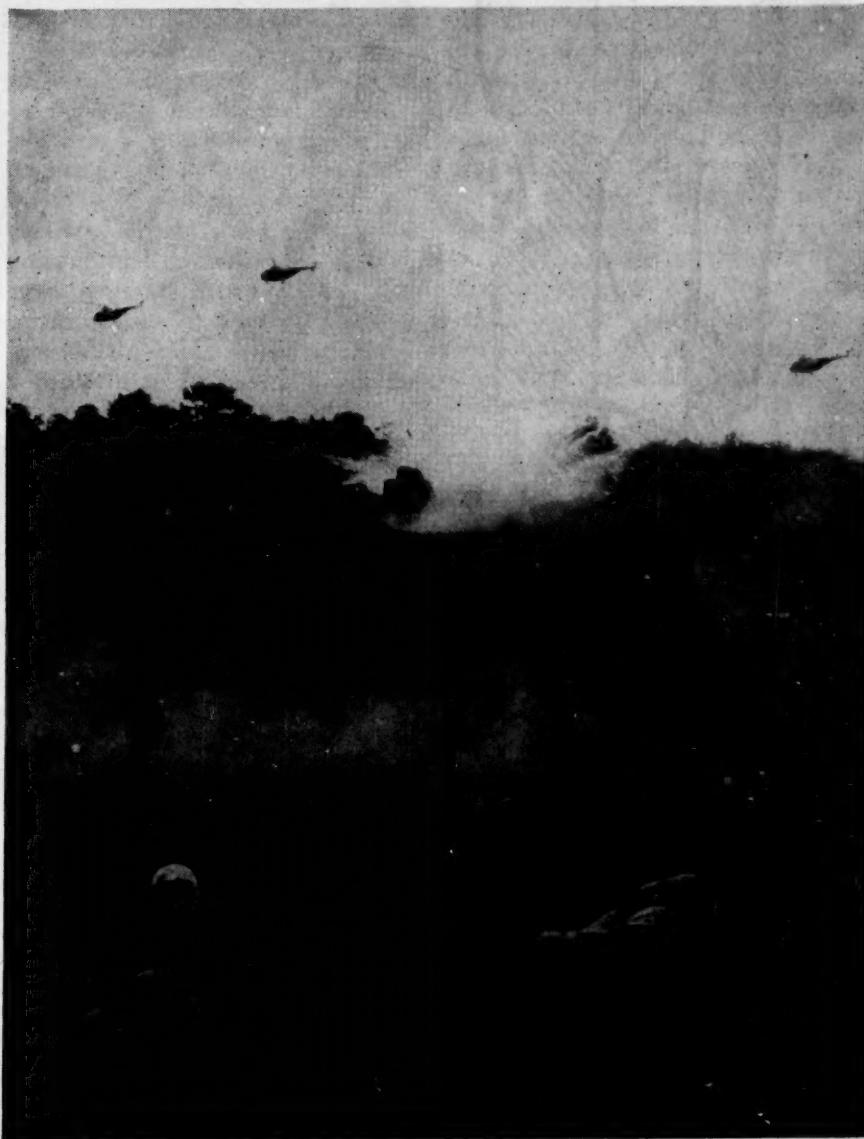
This plan for the antitank defense of the helicopter assault force offers no magic method or royal road for the Marines who must execute it. The safest place to be during an enemy tank attack is still far away, but Marines have a propensity for being in hot spots and for successfully staying there. The proper selection of terrain, the close team

work with Marine Air, the detailed advance planning for the utilization of all weapons, and the thorough training of every individual Marine will provide a defense that will work.

Course of action 2), (to devise a system of defense against tanks which is transportable by helicopter), is the recommended plan. Aside from the fact that it will be less costly in shipping space, logistical support and procurement dollars; it is more realistic and it can be made operational without long lead time. Reality demands that if we can't lift our tanks, we will have to defend our positions with the weapons that we can lift. Furthermore, these weapons can be made available now.

USMC

... yet powerful enough to adequately protect the airhead





Sensible Summer Uniforms

By LtCol R. D. Heinl, Jr

Does the Fiscal Director want to economize on Marine Corps money?

Would the Quartermaster General like to cut back dry cleaning and laundry loads at every warm-weather post?

Would you—individual Marines—go for summer uniforms that look smarter, hold up longer, cost less and permit real summer comfort?

If the answer is "Yes" on any one of the foregoing questions, take time to read this article.

The subject is Marine Corps summer uniforms, *not* including whites or utilities.

But first, as the radio announcers say, a few paragraphs of . . .

Background

Until the beginning of this century, Marine summer uniforms, both garrison and field, consisted of white trousers and blue blouse (direct ancestor of today's "white-blue-whites"), or complete whites—not only for officers, as at present, but for all hands. Obviously, neither rig was much of a combat uniform, although both served well enough at sea, in garrison and on liberty.

In much the same boat as the British (who sent troops into the South African War in red coats), Marines fought the Spanish-American War largely wearing blues. Following these sweaty wars, both countries looked around for something better. And in each case the British Indian Army provided an answer.

That answer was *khaki*, an Urdu or Persian word meaning "dust."

Khaki had been worn as a field

As you hang up your limp, stained khaki after a

long, hot summer are you ready to listen to reason?

uniform in India since 1857. Khaki was well adapted to the dusty plains, deserts and arid Northwest Frontier mountains in which Kipling's Indian Army fought during the 19th Century. Compared to red coats and pipeclay, or to Marine blues, khaki was a mantle of invisibility.

At the turn of the century, the Marine Corps adopted khaki for field service.

Now the single Marine Corps shirt of those days was of flannel (virtually identical, except in color, with those of 1955). To make this shirt more suitable for the field and to match the new khaki trousers, the flannel shirt was then changed to the mustard hue only now on the way out. Thus, during early expeditions of the 1900s, the Marine's field uniform was khaki trousers, flannel shirt and no field scarf. His summer garrison uniform continued to be blue and white, or the new khaki, which also boasted a standing-collar blouse exactly the same in cut and weight as today's white blouse, but of course with bronze buttons and emblems.

Before WWI, however, still another significant change had been authorized—a concession to appearance for the tie-less flannel shirt: the field scarf. The aboriginal field scarf, like the shirt, was mustard-colored flannel, definitely field haberdashery, which is the clue to its name.

Thus we come to the uniforms in vogue at the outbreak of WWI: white-blue-whites as usual; summer field uniform—khaki trousers, flannel shirt and scarf; summer garrison and seagoing—also khaki trousers but with the standing-collar blouse.

For its day, this summer uniform system was eminently efficient and deserved comment on 3 specific advantages:

(1) No summer uniform combination then in use required a Marine to wear more than a single layer of outer clothing. This was a key factor in summer comfort. All

who trod the snows of Korea know this "Layer Principle" in its reverse application to the design of cold-weather clothing: *the more layers of outer clothing, the more retention of body heat.*

(2) Garrison uniform and liberty uniforms were identical, and there was at least 50 per cent interchangeability (trousers) between summer field and garrison uniforms.

(3) The standing-collar blouse, worn on liberty, looked military and was wholly distinctive of the Marine.

But time marched on, and inevitably, with changing times, came changing uniforms.

The big departure of the 1920s was the roll-collar blouse, not only for greens but khaki as well. By the advent of Calvin Coolidge, both the garrison and the liberty uniform for summer—at least above the waist—consisted of 2 layers of outer clothing: a shirt and blouse. The summer field uniform now included the cotton khaki shirt made necessary by the roll-collar blouses. This shirt was, in many instances, enthusiastically adopted as a substitute for flannel.

Because of the relentless operation of the layer principle, the enlisted khaki blouse was soon abolished, and the khaki shirt and trousers held the field undisputed for both on-post wear and liberty, at least for enlisted Marines. But for officers, escape was not so easy. Complete with its roll collar, multiple outer layers and field scarf, the khaki blouse held on, even until today. The underlying assumption seems to be that officers just don't feel the heat, or at least can generally be relied on not to unbutton their blouses no matter how hot they are.

The summer uniform changes of WWII and immediately after, we all know.

After initial battles waged in khaki, the Marine Corps found a

completely new combat uniform—green utilities—and khaki, after more than 40 years where bullets were flying, headed for the showers as field clothing.

Following the war, the general sentiment of the Corps asked for re-examination of the summer garrison and liberty uniforms. The result of this re-examination was the khaki, or summer service jacket, for both officers and enlisted men. The jacket had the advantage of distinctive, smart appearance, but—as far as correct wear, especially by troops on liberty, went—an overcompensating disadvantage. The summer service jacket, exactly like its ill-fated predecessor, the roll-collar khaki blouse of the enlisted Marine in the 1920s, once again violated the layer principle. That is to say, because the khaki jacket also required a shirt, it imposed an unnecessary outer layer on the wearer; *q.e.d.*, it was hot. Because the jacket was hot—it was unpopular, and, when worn on liberty where supervision often wilts and slackens, the jacket was usually unbuttoned in short order. And so the enlisted khaki jacket went the same way as its ancestor, the roll-collar enlisted khaki blouse, and for the same sudorific reasons.

Now where do we stand today?

Leaving out utilities, enlisted Marines have 2 summer uniforms, or possibly 1½. Summer Service "A," tropical worsted khaki shirt and trousers, with ribbons and collar emblems—a somewhat dressier copy of the khaki combat uniforms of the past half-century—is the enlisted summer liberty uniform. Summer Service "B," the summer garrison dress, may be either tropical worsteds minus frills, or the old-style, launderable khaki trousers and shirt.

Officers wear both the foregoing combinations, as well as the khaki blouse; khaki jacket (optional); whites; and white-blue-whites. This last combination, on a restricted

basis, is also worn by all hands in certain non-FMF units ashore and afloat.

So much for the background.

The Problem Today

Today's summer uniform problem can be stated in question form — do our summer garrison and liberty uniforms give us the very best return in serviceability, economy, comfort and looks?

And the answer, I think, on all 4 (as well as on other) counts, is still "No."

As we have just seen, khaki was adopted for field service. Its color, its cut and, until the advent of tropical worsted and similar materials, its very cloth are those originally found suitable, more than 50 years ago, for the combat needs of campaigns which are now history.

The history of Marine Corps khaki represents, on the whole, a series of short-term improvisations on a basic khaki foundation never intended for its role today.

To be more specific, here are salient disadvantages of our summer service as presently designed and worn:



(1) Pretty it up as you will, the shirt-long trousers field-scarf combination is inherently neither dressy nor military looking, regardless of color scheme.



(2) The various khaki combinations are, in varying degrees, too hot. Remember, any summer uniform with more than one layer of outer clothing violates the basic rule for maximum coolness. This is what killed the enlisted khaki blouse and what killed the jacket. And tropical worsteds, even when the shirt (only 1 layer) is worn, are pretty warm for day-long garrison wear, however acceptable (relatively) they may be for shorter, usually cooler evening periods ashore.

(3) Our summer uniforms demand maximum upkeep: frequent laundering, ironing in every squad room and costly dry-cleaning.

(4) Because all khaki shirts and khaki trousers look pretty much alike, enlisted Marines on liberty are continually mistaken for members of the Army or the Air Force — a situation which shirt collar emblems have only partially cured. And it bears reflection while we are on this subject, that many enlisted Marines when allowed to do so (or often when not actively prevented) don the seagoing combination of dress trousers, white cap and khaki shirt, mainly, it seems, to prevent any unfortunate misunderstandings as to their branch of the service.

There are even international possibilities for misunderstanding. The summer service uniform of the Italian Army is all but identical with Marine khaki: trousers, shirt, garrison cap and even the field scarf worn outside the shirt. Thus the street-corners of Rome or Naples on a sweaty afternoon present sights which remind one only too strongly of Jacksonville, Norfolk or Savannah in the same weather.

(5) And the cost of summer uniforms is going up. Tropical worsteds cost a lot more than khaki, not only as initial investment but to maintain as well.

Indeed about the only points in favor of 1954s khaki garrison and liberty uniforms are that the color doesn't show soup-stains the way white does, and that Marine khaki uniforms represent a rather tenuous tradition which spans half a century.

Against the past context of tinkering, time would seem ripe for bold re-examination of the summer uniform picture, for quantum changes and a really "new look."

In such a re-examination, as was stipulated at the beginning of this article, we can discount existing summer uniforms which are, on the whole, functionally acceptable for their purposes. Examples in this class are utility clothing for combat, and officers' whites. Even the officers' khaki blouse, though it violates the inexorable layer principle, possesses marginal usefulness for a few official moments which do not precisely call for whites.

Thus our field narrows down. We have only to consider summer garrison (or service) uniforms and summer liberty (or dress) uniforms.

A New Summer Service Uniform?

For our lead on where to find cool and natty summer service uniforms, we need only look to the British, the French, the Japanese, the Canadians, the Australians, the New Zealanders, the South Africans — in fact, toward practically any military or civilian enterprise in the world, *not prosecuted by the US Armed Forces*. Almost every stateside golf course suggests an answer. Even Manhattan Island summer fashions, if you can believe the papers, could give us a clue.

This generalization perhaps ought not to be quite so sweeping. The Navy authorizes and sometimes wears both white and khaki shorts for officers and petty officers in the tropics. And the Air Force, notable for venturesomeness, has already experimented at MacDill Field, Florida, with 50 suits of khaki tropical shorts. Even so, the psychological climate within the Armed Forces has all too often favored self hypno-

tism as a substitute for sensible hot-weather uniforms. A good example of the power of this tabu is reflected in the fact that the British, who do possess admirable hot-weather clothing based on worlds and centuries of experience, expressly forbid their officers on duty in the US from wearing tropical kit in such torrid summer spots as Norfolk, Quantico and Washington, DC.

The summer service uniform I propose, as you may guess, is knee-length shorts of the so-called "Bermuda" type, knee-length (light weight) stockings and short-sleeved shirt without field scarf. Color and material should continue to be standard, washable, economical Marine khaki cotton.

The advantages of such a uniform are striking and numerous—overwhelming, some readers may say.

(1) *The Marine Corps would save a good few dollars in cloth alone.* In the GAZETTE's recent duel between mortarmen and the artillery, a backwoods contributor (who nevertheless wrote with considerable native pungency) made the suggestion—facetious, I presume—that the Corps economize by amputating one leg on each pair of issue trousers. This is practically what I am now proposing in dead earnest—but symmetrically of course. On my amateur calculations, adoption of shorts for summer service wear would save about one yard of material per pair of khaki trousers. The short-sleeved open-necked shirt would not only save the yardage which now goes into sleeves and cuffs, but would entirely obviate the field scarf during summer months. I am no expert on clothing costs (except my own), but I have no doubt that the Fiscal Director and the Quartermaster General would cheerfully save the difference in cost between such a summer service uniform and the one we now wear.

(2) *The uniform would put money into every Marine's pocket.* Being less expensive to make, it would cost less across the counter. Since, as I shall develop, it would wear longer than present summer service, replacement costs would be lower and less frequent.

(3) *Maintaining the uniform would be a breeze.* No dry cleaning at all

(and no dollar-and-a-half rides to the dry cleaners, either). About half as much squadroom pressing. Somewhat less frequent laundering. And about half as much space and weight per suit in foot locker or seabag.

(4) *The uniform would wear longer.* Conventional shirts give out first at the cuffs, elbows and collars. The short-sleeved, open-necked shirt has no cuffs and no elbows at all; its collar gets only a fraction of the friction (no tongue-twister intended) and perspiration that eat away the buttoned collar in hot weather. Trousers go at the cuffs, and, while shorts have to end somewhere too, the fraying at ground level is faster and worse on long trousers. Moreover, baggy-kneed trousers frequently get consigned to the cleaners, pressers or laundry before they really need to be sent, just for the sake of that crease. Shorts can't bag at the knees because they have no knees (except yours).

Thus the shorts and cut-down shirt combination gets rid of all the points of least resistance in today's summer service: cuffs, collars, elbows, trouser cuffs.

(5) *Comfort and coolness would be the order of the day.* High time we got around to this. And no arguments here, between short sleeves, open neck, no field scarf (oh joy) and bare knees—as opposed to long sleeves and buttoned cuffs, flue-like trousers and noosed scarf (no doubt complete with spring collar-stay).

(6) *The uniform would be smart looking and distinctive.* The combination is undeniably good looking; otherwise it wouldn't be a long-time favorite of practically the entire western military world (except us). The reasons it looks smart and stays smart are very simple: it has virtually no places to bag, fray, or uncrease, and it cannot, simply cannot, be worn half-on, half-off. This in turn stems from the fact that the uniform has no feature which the company crumb can readily leave adrift or unbuttoned—whereas we are all distressingly familiar with the loosened scarf and the gaping cuffs which the privates begin to affect today when the mercury starts hammering 90.

After weighing the foregoing considerations, you readers who are now convinced may well ask, "Why not

go the whole hog and prescribe this commonsense, cool, military uniform for liberty, too?"

Speaking purely from individual preference, I would go along with this thought.

On balance, however, the time is perhaps not here for such a long step, and the wiser policy would possibly be to accustom both the Corps and the public to shorts, by wearing them on-post for a while, and letting events take their course. However, the public may be more ready for shorts than some readers think. One national magazine has had a photo-story on the New York City summer fashion for business suits with knee-length "Bermuda-cut" trousers, while still another national magazine (selected at random) contains three competing ads plugging this type of shorts as the height of fashionable summer smartness.

Summer Liberty Uniforms

Let's start out with a clean sweep: Abolish the khaki tropical worsted shirt-scarf-trousers combination, ribbons, collar emblems, bronze tie-clasp and all. Instead, let's get something that looks a great deal more military, is just as cool if not cooler, is distinctly "Marine," and something that costs less to buy and less to keep up. Preferably, let us veer away from shirts and see what blouses offer.

My reasons for proposing so radical a departure have already been stated, but can stand brief repetition for emphasis:

Tropical worsted khaki (summer service "A"):

*Costs the Marine Corps too much.
Costs the wearer too much.*

Presents maintenance problems in areas without adequate dry cleaning facilities, and imposes undue load on dry cleaning facilities anywhere.

Looks (let's face it) only semi-military as usually worn.

Of the 3 different types of khaki blouse which the Corps has had for enlisted men since 1900, 2 have fallen from favor simply because they were too hot—a condition which existed because people had to wear two layers of outer clothing (e.g., shirt and blouse).

So let's consider the possibility of

finding a summer liberty uniform which embodies only a single layer of outer clothing, a layer which is not a shirt.

There are, in fact, at least 2 starters. One is a return to the khaki standing-collar blouse. The other possibility runs along the lines of the so-called "bush jacket."

A bush jacket is a type of tropical military blouse, much worn in Africa and Asia, with roll collar, short (or long) sleeves, and comfortably vented skirts, designed to be worn without shirt or tie.

Of the 2 choices which I mention, the standing-collar khaki blouse is the more soldierly in appearance and is certainly traditional to the Marine Corps. As all officers used to wearing whites will witness, a standing-collar blouse of summer material is comfortable and cool—a lot cooler than the roll-collar khaki blouse with its underlying shirt (the layer principle again!).

So perhaps the Permanent Uniform Board might find it worthwhile to investigate the cost, comfort and looks of an M-1955 version of the old standing-collar khaki blouse. This could be made of cotton or drill, and worn with cotton khaki trousers—a uniform that could be laundered rather than dry-cleaned. It would also meet what most of us would consider an absolute requirement: that the summer liberty uniform have an unmistakably Marine look. And certainly such a blouse would cost no more than a tropical worsted shirt and 2 or 3 field scarves.

But the bush jacket has advantages too.

For the bush jacket also conforms to the layer principle. It also is military and distinctive. Open at the neck, it would be ever cooler than the standing-collar blouse.

The bush jacket may not be quite as soldierly looking as the standing-collar blouse (nothing could be), but it has dash and character of its own. One particular advantage of the bush jacket is that it goes well with shorts and is frequently so worn. This last characteristic would tend to favor a bush jacket should the summer service shorts, proposed earlier, eventually become an authorized liberty uniform.

Each of the 2 choices—standing-collar summer service blouse or bush

jacket—has merit. Either or both, in my opinion, deserve exploration and test, and either would serve Marines appreciably better than present summer liberty uniforms.

To sum up, I believe that the Marine Corps should develop a radically new system of summer uniforms both for garrison service, and for liberty or dress.

The characteristics we want, in my opinion, are:

Better military appearance, enhanced coolness and comfort, distinctively "Marine" look, easier maintenance and longer wear economy.



The summer uniforms proposed in this article meet these requirements and would meet them far better than what we wear today. These uniforms differentiate clearly between the differing needs of on-post duties and occasions of display, including liberty. Translating these uniforms into their nearest equivalents, as described in Figure 49-3, *Marine Corps Manual*, we would now have:

Proposed Summer Service "A" (khaki liberty, ceremonial or dress uniform):

Khaki cotton trousers and blouse

(either old-Corps standing collar or bush jacket), with no change in existing shoes or headgear. Supersedes tropical worsted khaki trousers for enlisted men, and, for summer wear only, supersedes both types of khaki shirt (e.g., cotton and tropical garrison) and the field scarf.

Proposed Summer Service "B" (on-post, summer service uniform):

Knee-length khaki cotton shorts and knee-length socks; short-sleeved, open-neck shirt (existing khaki cotton shirt, with rolled sleeves and no scarf might be substituted). No change in shoes or headgear. Superseded khaki cotton trousers, field scarf and present khaki cotton shirt (unless worn with sleeves rolled).

PROPOSED NEW ITEMS

Knee-length khaki cotton shorts

Short-sleeved khaki cotton shirt

Khaki cotton blouse or bush jacket

Knee-length lightweight socks

ITEMS SUPERSEDED FOR SUMMER WEAR

Tropical garrison trousers

* Tropical garrison shirt

Khaki cotton shirt

* Field scarf

(*) Item to be worn with winter service uniform only.

(#) Substitute, with sleeves rolled, for new-type short-sleeved shirt.

This uniform system would confer a radically new look on Marines. But even though it calls for 4 new articles of uniform, it would not result in wasteful junking of a single existing piece of clothing. Even the tropical garrison trousers could be retained for cash sale to officers, who, presumably, would continue to have the option of wearing tropical worsted or similar fancy-goods in lieu of issue cotton. The remaining items on the superseded list would simply become winter-wear with greens.

By putting this comprehensive system to unit test, say, at one of the warmer Marine Barracks (why not Charleston, Key West, or Yorktown), I am convinced that the Marine Corps would discover the means to forge years ahead in looks and comfort, dollars ahead in cost and maintenance and boldly to the head of the column in willingness to adopt something better.

USMC

NATIONAL RESOURCES CONFERENCE

THE STUDY OF PROBLEMS OF THE entire national defense effort, as concerns the interdependence of the military effort and the resources of the country as a whole, is one of the reasons why the Industrial College of the Armed Forces was founded.

In order to acquaint officers of the Armed Forces who are unable to attend the resident course (as well as civilian leaders of business, government and industry) with a national appreciation of the problems of defense and mobilization, the Industrial College of the Armed Forces is presenting capsule courses on these problems throughout the country.

Interested career and Reserve officers are invited to attend these conferences along with civilian leaders.

Even minimum preparations for national defense involve so many people, so much material and so much money that the entire economy is affected. Actual full-scale war in one way or another affects every person, dollar, factory and pound of material in the country.

For these reasons it is imperative that a great many people understand the problems inherent in mobilizing our economy for war and for the prevention of war. This knowledge and understanding must not be confined to a few top-level military officers. Civilians, government officials and Reserve officers have, or will have, key positions in the mobilization of the economy.

Each year the college conducts a series of National Resources Conferences in major industrial centers.

During the 2 weeks' conference, 32 lectures on the subjects shown below are delivered by a team of 6 officers from all the military services.

Scope of the Conference

ORIENTATION.—Effort is made to

Any Marine officer, on independent duty or with a unit, who desires to attend any of the listed conferences is requested to forward his application through channels to CMC and not to the Industrial College of the Armed Forces.

Houston, Tex., Sept. 19 - Sept. 30, 1955

Detroit, Mich., Sept. 26 - Oct. 7, 1955

Santa Barbara, Calif., Oct. 17 - Oct. 28, 1955

Portland, Ore., Oct. 24 - Nov. 4, 1955

Miami, Fla., Nov. 28 - Dec. 9, 1955

develop the concept of "economic mobilization" and the significance of a study of it.

ORGANIZATION FOR NATIONAL SECURITY.—A background lecture designed to give a better understanding of The National Security Act and Defense Production Act.

PROCUREMENT.—This presentation covers procurement practices and procedures within the Armed Service and the legislation behind military procurement.

WAR FINANCE.—A discussion of the role that financial policies and financial institutions play.

MANPOWER.—A discussion of certain principles based on present-day concepts of manpower, followed by a resume of the world manpower situation (Free World *vis-a-vis* Communism) with emphasis on quality of manpower as an element of national power.

STRATEGIC AND CRITICAL MATERIALS.—A discussion of the mineral and material resources of the United States with emphasis on prospects for the future.

INTERNAL SECURITY.—A survey of policies, methods and means of protecting industry and our civilian population against espionage, sabotage and direct atomic attack.

PUBLIC OPINION.—A discussion of public opinion as a fundamental factor in our national strength and thus our security.

PRODUCTION.—A discussion of some of the over-all production problems that would arise in the event of a future all-out mobilization.

TECHNOLOGICAL PROGRESS.—A review of the importance of technological progress from the national viewpoint, the military organization for research and development.

TRANSPORTATION AND COMMUNICA-

TIONS.—A survey of the various media and their contributions to the American economy.

FOREIGN AID AND MUTUAL SECURITY.—A discussion of the organization and operation of the Mutual Security Program.

FOREIGN ECONOMIC POTENTIAL.—Areas covered include: Great Britain, Western European countries, Eastern European countries, Canada, Latin America, Africa, Middle East countries, Far East countries, USSR.

GEOPOLITICS.—An evaluation of geopolitics as a theory of world power development.

AGRICULTURE.—A study of American agriculture as a basic industry.

ECONOMIC WARFARE.—A discussion of economic warfare and the methods by which it is carried on.

REQUIREMENTS.—A discussion of the generation of requirements for all-out mobilization for war as they affect the military, civilians, foreign aid and a study of requirements computations at JCS level.

FUEL AND POWER.—A summation of America's position regarding its energy resources.

DISTRIBUTION LOGISTICS.—Presents the function and importance of the distribution phase of logistics and our experiences in WWII.

EMERGENCY MANAGEMENT.—Identification of emergency management problems, evaluation of actions taken prior to and during the Korean war and possible future actions.

CIVIL DEFENSE.—Role of CD in minimizing effects of nuclear attack.

GEOECONOMICS.—American economy in relation to the economies of the other nations.

SOVIET COMMUNISM.—A discussion of the history of the political development of the Soviet Union.

Ogden, Utah, Nov. 28 - Dec. 9, 1955
Mobile, Ala., Jan. 16 - Jan. 27, 1956
Berkeley, Calif., Jan. 23 - Feb. 3, 1956
Jackson, Miss., Feb. 13 - Feb. 24, 1956
Shreveport, La., Feb. 13 - Feb. 24, 1956
Waco, Tex., Mar. 12 - Mar. 23, 1956

Savannah, Ga., Mar. 12 - Mar. 23, 1956
Des Moines, Iowa, Apr. 9 - Apr. 20, 1956
Chicago, Ill., Apr. 16 - Apr. 27, 1956
Buffalo, N. Y., May 21 - June 1, 1956
Richmond, Va., May 14 - May 25, 1956

IDEAS!

By LtCol R. P. Keller

SOCIOLOGISTS TELL US THAT MAN is distinguished from other living organisms more by his pure reasoning intelligence than by any other single characteristic. The entire progress of human civilization has been placed and made possible by new ideas and refinements to old ideas, which result from the exercise of these human reasoning abilities. In fact, without continual generation of new thoughts, improvements and ideas, any civilization—or nation—or military organization—is destined for sterility, stagnation and impotence.

There is no secret involved in the fact that not to go forward, is to retrogress. Take, for example, the emphasis placed within industry on continually harvesting a new crop of ideas. Co-ordinated, purposeful programs are being adopted on ever-widening scales, not only to develop executive and management talent fertile with ideas, but also to give incentive to all employees to come forth with their suggestions. As of the present day, there are nearly 10,000 suggestion systems in operation in progressive, vigorous, commercial concerns. There is even a National

Association of Suggestion Systems, organized in Chicago in 1942. This association stresses the rewards which accrue to individuals who make worthwhile suggestions on ways to get a job done better, cheaper and faster. These rewards are in the form of "recognition" of an individual's importance. At best, they take the form of substantial monetary bonuses.

The US Government long has appreciated the value of encouraging suggestions from its employees and has established award systems throughout all of its important agencies. All of the military departments have very active programs to promote suggestions from their civilian employees. In Fiscal Year 1954, the Department of the Navy received 68,200 suggestions; adopted 22,900; awarded a total of \$631,000 to civilian employees based upon their suggestions; and estimated that savings from those suggestions adopted would total \$15,740,000 during the first year of their use alone! These figures are provided by the Navy Efficiency Awards Committee of the Navy Department. As could be expected, the better the suggestion the

higher the award. Repeaters are encouraged in this field—no limit of "one to a customer," because each usable suggestion puts money back into the taxpayer's pocket.

The services themselves, of course, are receptive to ideas from servicemen. Many readers will recall the infantry sergeant's recommendation for a blade-type, quick-fix addition to American tanks, which defeated the tortuous hedge-rows of Normandy and permitted resumption of the expansion of the Allied beach-head in France in 1944. The value of that single suggestion can never be measured.

Now, how does the Marine Corps fit into this suggestion and idea picture? Our civilian employees, of course, come under the overall awards program of the Department of the Navy, administered appropriately by the Commandant of the Marine Corps, and need not be discussed further except to mention in passing that it is a profitable field for continuing emphasis and effort. What about Marines themselves?

In a January 1953 GAZETTE article, Maj L. F. Snoddy discussed the Marine Corps Development Center and

How a new system of bayonet fighting was born . . .

. . . evaluated . . .

MARINE CORPS SCHOOLS
QUANTICO, VIRGINIA

IN REPLY REFER TO
21 July 1953

From: Major George M. GOLLEHER, 02h239, 1803/5210/5810, USMC
To: Director, Marine Corps Development Center
Via: Director, Marine Corps Educational Center
Subj: Proposed new system of bayonet fighting
Encl: (1) Manuscript for "A COMPARISON OF TWO DIFFERENT METHODS OF BAYONET FIGHTING"

1. Enclosure (1) was prepared as a thesis for a Doctor of Philosophy Degree by Armond H. SEIDLER, Instructor in Personal Defense in the department of Physical Education of the University of Illinois.

2. Dr. SEIDLER was a bayonet fighting instructor in the U. S. Army for about five years during World War II. During this period he taught bayonet fighting according to the approved army system and the system as used by the U. S. Marine Corps.

3. Mr. SEIDLER believes that the present system of bayonet fighting, unchanged to any significant degree since 1905, is difficult to execute well; that the movements are awkward and that the balances, speeds and coordinations of movements are poor. He feels that bayonet fighting, since it is an aggressive and offensive method of fighting, should be as nearly as possible to the natural movements that are either artificial or difficult to contain any movements that are either artificial or difficult.

Mr. SEIDLER devised

MARINE CORPS DEVELOPMENT CENTER
MARINE CORPS SCHOOLS
QUANTICO, VIRGINIA

RBM:1jm
17 Nov 1953



From: Director
To: Commandant of the Marine Corps
Via: Commandant, Marine Corps Schools
Subj: Proposed new system of bayonet fighting
Encl: (1) Copy of Major George M. GOLLEHER, USMC ltr of 21 July 1953 to Dir MCDC, same subject
(2) Copy of CG MCRC PISC ltr 15984 of 2 Oct 1953 to Dir MCDC w/o encl, same subject
(3) Copy of CG MCRC San Diego Cal. ltr 18717 of 2 Nov 1953 to Dir MCDC w/o encl, same subject
1. Enclosure (1) transmitted to this Center doctoral dissertation on a proposed new system of bayonet fighting, and recommended further investigation of the system with a view toward possible adoption for Marine Corps use. The dissertation, "A Comparison of Two Different Methods of Bayonet Fighting," by Doctor Armond H. SEIDLER is appended as enclosure (1) to enclosure (1) of this letter.

Suggestions merit consideration. Those who submit them merit recognition.

explained its purposes and operations. To refresh the reader, it might be well to mention that the Development Center functions under the provisions of Marine Corps General Order No. 181, a general order which, incidentally, all Marines might profitably re-read periodically. Briefly, however, the MCDC is designed to stimulate and promote growth of ideas, evolve and perfect tactics, techniques and equipment; search out and investigate ways and means of evolving and improving new tactics, techniques and equipment. Contact is maintained with major FMF units, ground and air, through liaison officers.

An important part of the General Order covering the operation of MCDC states, *individuals are encouraged to submit ideas via appropriate channels to the MCDC*. The question is posed here "Are they?" Do we have an *active* suggestion system similar to those found in industry, or in the civilian components of the federal government? Do all Marine unit commanders truly encourage the submission of ideas by their officers and men, to the practical limit? At this writing, there are somewhat over 200,000 Marines on active duty, each one of whom is a potential source for a worthwhile idea that may save time or money—or lives. Can we afford

not to take full advantage of this potential?

This writer believes that the Marine Corps as a whole can gain by a more purposeful and vital administration of the policies reflected in General Order No. 181. Now, it is true that as of the present time a cash award cannot be made to a serviceman for his worthwhile suggestion, in a manner comparable to his civilian counterpart. However, there are other awards, practical and worthwhile which can be used to spur interest and incite individuals to deep cogitation towards improving the way we do things within the Marine Corps. And this, perhaps, is the key to a successful suggestion system—convince the individual that it is to his personal and immediate advantage to overcome inertia and the natural antipathy to hard thinking (which so many of us have) and offer his ideas.

Any Marine can earn an appropriately phrased commendatory letter from the Commandant or the Secretary of the Navy, if he comes forth with an idea worthy of such recognition. Inclusion of correspondence like that in the personal file of any officer or enlisted man can be very weighty evidence as to his qualifications for promotion. In the competitive future, which apparently lies before us, such favorable mat-

ter becomes extremely important and actually may tip the scale in favor of increased rank and pay. For lesser ideas, appropriate notations on fitness reports tend to accomplish a similar result, very salutary from the point of view of the individual concerned. In other words, elevation of an officer's or man's professional prestige is a prime incentive and reward in the field of beneficial suggestions.

For enlisted men who are not career Marines and might be spurred and impressed only by something more tangible and immediate than professional prestige, there are other possible awards. These might include meritorious promotions, within the limitations of current administrative policies, or even special liberty. Of course, appeals to pride, esprit and patriotism also can be employed profitably. It is certain that the ingenuity of officers and non-commissioned officers can provide worthwhile recognition in many other forms for individuals who distinguish themselves through their ability to ferret out a new idea or a new modification to an old idea. Such recognition would compare very favorably in value to whatever cash award a civilian might receive for a comparable idea.

It appears, then, that practical and desirable awards to Marines for their

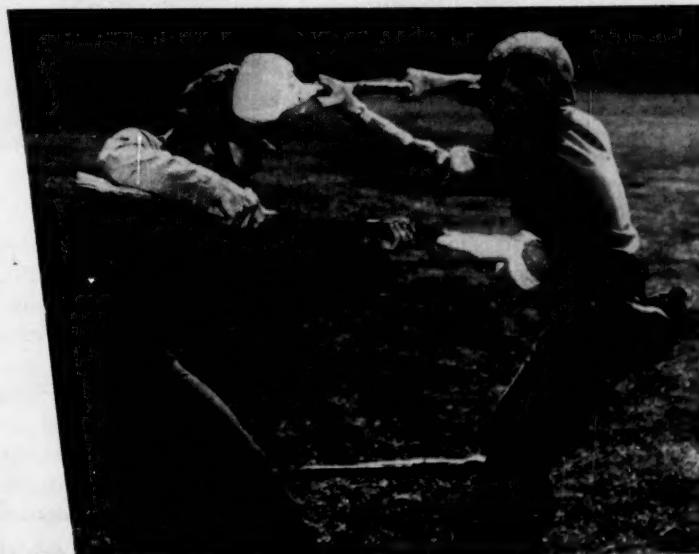
... tested ...



UNITED STATES MARINE CORPS

From: Commandant of the Marine Corps
To: Commanding General, Marine Corps Recruit Depot, Parris Island,
South Carolina
Subj: Evaluation of proposed new system of bayonet fighting
Ref: (a) Dir MCDC ltr to CMC Rm:11ja of 17 Nov 1953
Encl: (1) A comparison of two different methods of bayonet fighting
1. The purpose of this letter is to provide for continued evaluation
of the proposed new system of bayonet fighting discussed in reference
(a).
2. Please undertake further evaluation of subject system with a view
to adoption of the entire system or portions thereof for use by the
Marine Corps in bayonet fighting instructions. Enclosure (1) describes
the proposed system and compares it with present bayonet instructions.
3. The evaluation program should be conducted without excessive dis-
ruption of scheduled training. Insofar as fund expenditure is con-
cerned, it appears that the sole expense of the program would relate to
manufacture of "Fugilsticks." These training devices should be con-
structed normally available to the majority of Marine
units. Modifications of the device as en-
dured within

... and finally adopted



ideas can be provided. How to go about administering an intelligent and active suggestion program within a military unit? Here again, the initiative and ingenuity of officers and noncommissioned officers are at a premium. They must provide most of the answers. However, for ex-

ample, a periodic "request mast" could be established by a unit commander at which time, through adequate emphasis and publicity, individual Marines would be encouraged to offer their suggestion on how to improve equipment and procedures, or what-have you. A general spirit

of receptiveness to new thoughts can be developed within a unit, merely by the personality, attitudes and leadership of its officers and senior NCOs. Another method of mulcting ideas from Marines is to catch them as they return from an overseas tour, or perhaps an extended fleet exercise. The illustration is one sort of form which might be used to help ensure, insofar as practical, that no man with a good idea still unexpressed lacks an easy means of getting that idea on record where it can be evaluated. Such aids would be intended to supplement prescribed official reports, rather than to replace them to any degree. Still a further method of promoting suggestions and ideas would be to establish appropriately named and staffed committees, within battalion/squadron size units particularly, to assist the commanding officer in encouraging and evaluating ideas.

The size, type and mission of a particular unit, its physical location and other variables will have an effect upon administration of an active and continuing program designed to encourage Marines to think up and present new ideas. However, the important considerations might be summarized broadly as follows:

- a) Design a program fitted to the specific unit in question.
- b) Constantly "sell" the program.
- c) Provide worthwhile awards, based on the value of the suggestion.

Surely the benefits to be derived from usable ideas are worth the expenditure of co-ordinated, purposeful efforts of an order similar to those invested in safe-driving and industrial safety campaigns!

What to do with these suggestions, once they have been received? That's easy. Evaluate them and forward them as high up the chain of command to the MCDC and Commandant of the Marine Corps, as their value and applicability warrant. Every honest, sincere idea merits consideration, and its "father" merits recognition.

Marines are "first to fight." Let them also be "first to suggest." Let's get full benefit from those more than 200,000 thinking individuals who make up our Corps, to the ultimate good of that individual, his Corps and his country.

USMC

SUGGESTIONS

(Please fill in form and return to adjutant)

(Classify as appropriate when filled in)

1. You have just completed a tour of duty beyond the continental limits of the United States. During this tour it is likely you have made observations which could be of value to the Marine Corps. You are asked, therefore, to take time now and think back over your experiences. What comments or suggestions can you make, not already contained to your knowledge in an official report, which might help improve the Marine Corps? For example, was there a particular piece of equipment you are familiar with that performed unsatisfactorily and could you suggest a way to improve it? Do you have any ideas on how to more efficiently use the manpower in such units as you served with? Can you suggest means of improving food, clothing, personal or technical equipment, or administrative procedures? If your duty involved combat, were there any new tactical lessons learned that you think worthwhile? You do not have to answer all these questions specifically. They are just samples to give you the idea of what is wanted.

2. You are asked to give free rein to constructive criticism below, wherever possible offering your suggestions for improvements. Keep it impersonal, and remember the purpose of this paper is to *improve* the Marine Corps by taking advantage of *your* experiences. The essence of this report, and thousands like it, eventually will reach the Commandant of the Marine Corps and can assist him in continually increasing the efficiency of our Corps.

Write simply and legibly. Be brief and to the point!

(A) NAME	RANK	MOS	SER. NO.	DATE DEP. US	DATE RET. US
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(B) ORGANIZATION(S) SERVED IN OVERSEAS—YOUR DUTY ASSIGNMENT(S)

(C) NATURE OF OPERATIONS INVOLVED IN DURING THIS PERIOD. (*Very* briefly, such as "carrier based in Mediterranean," "Embassy duty in Stockholm" or "rifle platoon A/I/9").

(D) COMMENTS AND SUGGESTIONS:

(Use other side if needed)

Suggestion form—catch them when their ideas are still fresh



Retain the mortar's lethality, but correct its accuracy and range limitations. Why not design a . . .

MORTAR-HOWITZER?

By 1st Lt C. J. Spring, Jr.

MORTARS? SURE, THEY HAVE limitations and shortcomings. Now, what's the Marine Corps going to do about it? This has been the topic about which a storm of opinions and rebuttals has been generated during the past year.

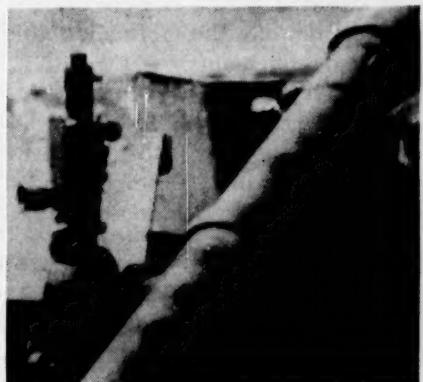
One side of the controversy says that the mortar is inefficient and should be retired from the Marine Corps Tables of Equipment. The other side maintains with no less certainty that the mortar is effectively accomplishing the mission for which it was designed.

Here is a dilemma which extends from radical abolition to conservative status quo. Somewhere between these extreme positions, the Marine Corps can find a workable compromise to the most effective employment of the mortar. And the solution might be more than just a compromise. It might be a brand-new weapon most suited to fulfill the artillery requirements of amphibious fighting.

The spotlight has been on the weakness of our infantry mortars and their employment. The weapon is relatively inaccurate and its range is limited. Mortar employment by infantry introduces complex problems of logistics, communications, adequate observation of fire, personnel training and co-ordination with other supporting arms. This indictment against the mortar is no doubt justified, but on the other hand, the infantry commander's "private artillery" has certain inherent advantages. The advantages amount to this: by size, the mortar is the most lethal weapon currently employed by the Marine Corps. Enemy mortar fire cost more Marine lives than



Desirable characteristics for the mortar-howitzer — the Brandt's mobility (upper left), hydraulic recoil, breech loading and a more stable sight mount



any other weapon employed against us in WWII. The lethality of one heavy mortar company of 12 pieces is more than equivalent to that of a 105mm howitzer battalion.

How can we retain the mortar's lethality on the battlefield and correct its shortcomings? A solution to this question requires an analysis of these shortcomings. Limitations of the mortar can be separated into 2

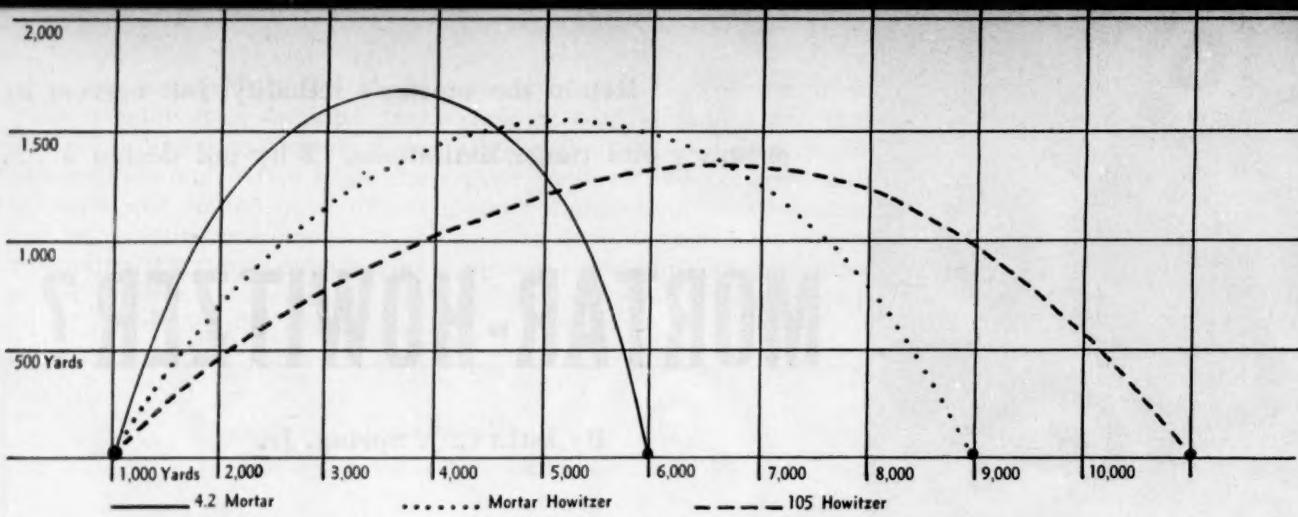
distinct headings — organizational and technical.

Briefly, the solution is to employ the 4.2 heavy mortar as artillery — more specifically, as the fourth firing battery in the light artillery battalion. A number of advantages would accrue from this. First, the heavy mortar would enjoy the benefits of artillery's motor transport and train



of supply from the ammunition supply points to the firing positions. A second advantage is that the heavy mortar would share artillery's highly developed observation-liaison-communication system that reaches into every command echelon of the supported infantry regiment. As artillerymen, the officers and men in heavy mortar batteries would be trained specialists in the delivery of indirect fire. Artillery mortar batteries could utilize air observers, countermortar radar, artillery survey and artillery target intelligence. These are some of the reasons why the heavy mortar should be turned over to artillery control. The results would be more dependable mortar fire for the infantry commander.

But what about the heavy mortar's technical shortcomings — its in-



Comparative trajectory table

accuracy and range limitations? The solution to this problem requires a new approach to weapon design. Basically, we should build the weapon up around its projectile, the killer in final analysis. The projectile is the mortar's only excuse for existence. The mortar round packs a hard punch, it bursts with a terrific explosion, propelling many small shell fragments against the target at high velocity. The results are devastating. Those who have seen the results of incoming mortar fire, and our own mortar fire against the enemy, will testify to this.

Therefore, maintaining the mortar round, how might we increase the weapon's accuracy? First of all, the weapon should be more stabilized. The weight of the 4.2 mortar (M30) is only 626 pounds complete. It's no wonder that such a light weapon isn't as accurate as we might like. If the heavy mortar is employed as artillery, there's no reason why its weight should be so limited. We could double its weight—even triple its weight. It would still be no heavier or more cumbersome than the 75mm pack howitzer. To the artillery, it would be a light, very compact weapon. And this extra weight would furnish the increased stability that the heavy mortar needs. Not only would it increase the mortar's stability, but it would afford weapon designers the opportunity to refine the mortar with hydraulic recoil and counter-recoil fittings and a wider traversing arc. The weapon could be mounted on wheels for added mobility. And a more stable sight mount could be built into the mortar. The results would be more accuracy and even more lethality than the weapon al-

ready enjoys.

If we keep in mind that the mortar need not be constructed to fulfill infantry specifications—that the mortar is basically an artillery piece—then we can broaden our concept. There's no need to design the mortar to break down into man-portable loads; but this is how our heavy mortar was designed. Movement of a 4.2 mortar company without motor transport is a project of major dimensions. The heavy mortar should be carried by vehicles—not by men. So why construct the mortar to break down into man-portable loads? You can actually grab a 4.2 mortar by the tube and rattle it. That's how loosely the parts fit together. The mortar would be more accurate if it were a one-piece weapon, and it would be more adaptable to other refinements.

Another innovation that would improve accuracy would be lengthening the mortar's tube. Remember, the kid in the neighborhood with the longest peashooter scored more possibles, granting a modicum of natural ability? The reason is obvious. The peashooter with the longest bore guided its projectile on a more stable trajectory because the projectile was controlled by the bore for a longer period of time.

The same principle would apply to the mortar, and the consequences of a longer bore would extend beyond improved accuracy, as will be discussed below. How long should the bore be? An actual figure would be difficult to arrive at without the tests and computations of the weapon designer, but a bore-length of 7 or 8 feet might be a close approximation. This may strike the reader as a radical departure from standard

mortar design. And, as a matter of fact, it is; because the mortar is defined as being a short-tube weapon. And the reader might also consider the awkwardness of loading such a mortar from the muzzle. The answer to this is simple. This new mortar would not be loaded from the muzzle. It would be loaded from the breech. Now, this possibility is interesting for the following reason: the standard mortar which is loaded from the muzzle requires that the projectile be smaller than the bore to provide the freeplay necessary for the round to drop easily to the base of the tube. In the case of the 60mm and 81mm mortars, this freeplay allows the propelling gases to escape around the projectile, with a corresponding loss in range. Also, this freeplay results in inaccuracy because the tube has less guiding influence on the round.

The 4.2 mortar avoids this difficulty by providing for spin stabilization of the projectile. This means that at the moment of detonation of the propelling gasses, the rotating band of the round becomes positively engaged in the lands and grooves of the bore, providing a snug fit between round and bore—a positive gas seal. This approach to the problems presented by a muzzle-loaded weapon would be very satisfactory—were it not for the fact that it also limits the ability of the mortar to fire at extremely high angles of elevation, one of the mortar's characteristic advantages. This will be discussed in greater detail.

The theoretical heavy mortar under discussion is forced into a workable solution of this problem. If we require that the bore be extremely long, we must also accept the fact

that the weapon must be loaded from the breech end. Thus, freeplay between round and bore isn't necessary, because the round doesn't have to fall from the muzzle to the base of the tube. So we can design the diameter of the round and the bore so as to afford a very snug fit. This would provide for maximum control of the trajectory and a positive gas seal with a corresponding increase of range.

The actual mechanics of a breech-loading mortar could be accomplished in a number of ways: by the standard swinging or sliding breech-blocks; or by a tube-within-a-tube, wherein a loading aperture in the side of the main tube is exposed when the tube is fixed in recoil, but is sealed off by an outer tube when the weapon returns to battery.

It was stated above that the 4.2 mortar, being spin-stabilized, is limited in its capability of firing extremely high angles of elevation. Actually, the 4.2 mortar possesses no more capability to fire high-angle trajectories than does the 105mm howitzer. Both weapons are limited because they are spin-stabilized.

The spinning of the projectile has a gyroscopic effect, and just as a toy gyroscope tends to maintain the direction of its axis of spin against any outside force, so does the spinning projectile. So when the projectile reaches the maximum ordinate of its trajectory, it attempts to remain in a nose-up attitude. But gravity forces the trajectory down. This results in gyroscopic precession, just as a toy gyroscope precesses slowly in a circular motion. It is this precession that is known as drift, and if the spinning motion is clockwise, the precession or drift will be to the right. Now if we fire the projectile at too high an angle of elevation, the trajectory will bend down so sharply at its maximum ordinate, that instead of controlled precession or drift, the projectile will refuse to nose over, and it will fall to the earth base-first. This means then, that a spin-stabilized projectile can't be fired at an angle of elevation higher than a fixed limit (approximately 1,360 mils) with predictable results.

The inference, of course, is that our theoretical mortar should be fin-stabilized in order to maintain the

mortar's characteristics of extreme high-angle fire. It is true that by stabilizing the projectile with fins, we are providing more projectile surface to the effects of wind resistance (which will decrease the range) and buffeting winds (which will blow the projectile off its predicted trajectory). But it would be worthwhile to suffer this disadvantage in order to keep the mortar's characteristics of extreme high-angle fire.

How can we increase the mortar's range? The range of the 4.2 mortar (M30) is 6,500 yards. This range can be increased. It might be done by increasing the propelling charge. This, however, wouldn't be a satisfactory solution, because increasing the propelling charge would subject the projectile to a greater chamber pressure. Thus, the projectile would require thicker walls of a metal capable of withstanding the greater pressure. It was stated previously that the only excuse for the existence of the mortar is its terrific lethality. And the mortar's lethality results from the fact that choice of metal, and weight distribution, need not be sacrificed to design a very strong shell capable of withstanding the chamber pressures of howitzers and guns.

In keeping with the original plan to design the weapon around its lethal projectile, the characteristic propelling charge of mortars should not be changed and the chamber pressure should not be increased. Where will we find our increased range? Lengthening the bore, as suggested above, should increase the range. In an artillery weapon, the pressure of the propelling gases continues to push the base of the round, even after the round has cleared the muzzle and enters the phase of free-flight. Artillery rounds are actually still being accelerated after they clear the muzzle, and the maximum "muzzle" velocity is not reached until a short interval after the round actually passes through the muzzle. By increasing the length of the tube, we provide for a longer period for the propelling gases to push against the base of the round, and cut down on some of the loss of energy when the round passes clear of the muzzle and the propelling gases are rapidly dissipated in the surrounding air. Thus, the longer tube provides an

increased maximum range.

The weapon that has been discussed here is an extreme departure from the standard American mortar. Indeed, this theoretical weapon might not be called a mortar at all. The mortar is conventionally defined as a high-angle, muzzle-loaded, short-tube weapon. This new weapon maintains only the desirable characteristics of mortars: high-angle fire and great lethality or killing potential. It might better be described as a cross between a mortar and a howitzer. But there is no reason to restrict weapon design to definitions.

Actually, the principles expressed here are not new. Ordnance experts have already conceived of such a weapon, and the Marine Corps needs to study its possibilities with a view to developing it for amphibious artillery.

This weapon would meet the requirements of amphibious fighting very neatly. It would be lighter than conventional artillery, and this would be an advantage, especially in helicopter landings. It's true that we've developed a helicopter that can carry the 105mm howitzer, but it would take a lot of these to land an artillery battalion with men and ammunition. It would take just half as many to land a battalion of light-weight, mortar-howitzers. And a jeep or mighty mite could serve as prime mover for the mortar-howitzer. This would be an additional savings in weight and space for amphibious operations.

The mortar-howitzer's big advantage is its terrific lethality—its power to kill. This lethality is supplemented by its high rate of fire—so the mortar-howitzer could inflict unusually high rates of casualties in a short time. With these advantages, the weapon would be ideal for landing operations, where we can expect mass counterattacks directed against our beachhead. And finally, the weapon's mobility makes it extremely suited to firing a front of 360 degrees, which is a basic requirement for helicopter landings behind enemy lines.

A mortar-howitzer is the direct support weapon most ideally suited to fulfilling the Marine Corps' mission. The Marine Corps needs a mortar-howitzer.

USMC

SPY OUT THE LAND

Espionage is as old as war itself—the professional spy is one of the least flamboyant and most self-effacing creatures in the world

By Maj R. Hargreaves (Ret)



There is nothing the cinema or the popular novelist delights in more than in a good roaring, ranting spy story. The beautiful woman agent—invariably a countess—wheedling the handsome young officer into the betrayal of top secrets which, in cold fact, would be known only to the Commander-in-Chief; the master-spy—in immaculate tuxedo—burgling the Ambassador's safe as easily as he would open a can of beans, . . . we have seen it and swallowed it a score of times. Indeed, such a flood of highly-colored flapdoodle has been screened and published on the subject of espionage, that the very mention of the word "spy" tends to conjure up an entirely false and over-romanticized picture.

Actually, the professional spy is one of the least flamboyant and most self-effacing creatures in the world; the very last thing he wants is to draw attention to himself. Designedly colorless and unremarkable, beneath his assumption of mediocrity, the real secret agent must be a man of cool, unfaltering courage, with a phenomenal memory, infinite patience and a definite flair for languages. He must possess an exceptional faculty for assimilating detail, a thorough grounding in international law, a positively encyclopedic knowledge of the world, its capitals, its cities, towns and villages, roads and railways, an unerring gift for detection and, finally, something of the actor's gift of personation.

As an element in international conflict, espionage is as old as war itself; since all sound military planning must be based upon carefully sifted information as to the enemy's strength, resources and intentions—intelligence to which the secret agent is a prime contributor.

Alexander the Great made as free use of spies as did Julius Caesar, whose colleague, Crassus, was one of the greatest spy-masters of all time. The historian Gibbon, in his *Decline and Fall of the Roman Empire*, tells how myriads of spies scattered "libels" (i.e. defamatory propaganda) among the rank and file of the Imperial Legions; their object being to shake the men's confidence in their leaders' skill and integrity. The agents of the frail but tempestuous courtesan-empress Theodosia swarmed all over the Middle East, and woe betide them if their reports failed to appear with the utmost punctuality. Moses, leading the great Jewish migration from Egypt in the teeth of stubborn opposition, sent emissaries to "spy out the land of Canaan;" while his successor, Joshua, on the eve of his advance against the Canaanite kings, "sent out two men of the Shitim to spy secretly, saying, 'Go view the land, even Jerico.'"

Throughout medieval times spies were freely employed by both French and English in their interminable warring. The 14th Century "Statutes and Ordinances of War" referring to them as *Explorateurs*, and prescribing that those who had the misfortune to be caught should be "hanged, drawn and quartered." At the time when Philip of Spain launched his mighty Armada against the England of Queen Elizabeth, London and the Channel ports were thick with spies in the pay of the intending invader. Many of them were men of English birth, who had fled the country when those professing the Roman Catholic faith had fallen into disfavor. Among them were many Jesuit priests, men who were so devoted to their religious beliefs that they were prepared to further them even at the sacrifice of their country's safety. Had the Spaniards succeeded in landing, such emissaries would have formed a deadly fifth column to sabotage English resistance from within. Incidentally, there would have been noth-

ing new or singular about this form of subversive activity, for a formidable fifth column had played a momentous part in bringing about the fall of Babylon so early as 690 BC.

The great Duke of Marlborough employed a highly efficient intelligence service in all his victorious campaigns against the French. But it throws a curious sidelight on contemporary military finance to discover that the funds for the upkeep of his agents had to be found out of the allowance made for the troops' bread-money. In effect, the commander met the cost of maintaining his spies out of the difference between the amount shown on the original indent and the value of the smaller total of bread rations consumed on the actual day of issue; his field strength having been reduced in the interim by casualties and the sick.

It was a somewhat odd, if traditional, method of meeting the expenses of a secret service; and it was not until later days that Frederick the Great of Prussia originated the system of creating a separate fund out of the general army account, from which his agents could be paid. Since the warrior-king boasted that he went to war "with one cook and a thousand spies" it is obvious that a mere surplus in the bread-money would have been quite inadequate to meet the heavy expense of his information service.

IN MANY RESPECTS the American Revolution reproduced similar conditions to those characterizing the struggle between King and Parliament throughout the years 1642 to 1646. Both sides shared a common language; while if Washington's forces were operating in a countryside predominantly friendly, the British troops were not without "Tory" sympathizers prepared to stake their lives and property in the cause to which they adhered.

Washington was extraordinarily well served, however, by his Chief of Intelligence, Capt Benjamin Tallmadge. It was Tallmadge who had charge of the British Staff Officer, Maj John André, after his capture while returning from a rendezvous he had made with the traitorous Benedict Arnold. Calmly considered,

it can safely be said that André was the most inadvertent spy in military annals. Entrusted with the highly important, if thoroughly distasteful task of arranging with Arnold for his surrender of the West Point defenses, André committed the incredible folly of making his way to his rendezvous with the American commander at Dobb's Ferry—situated in no-man's-land—in civilian garb; or as the term went in those days, "colored clothes." Challenged and detained by three sharp-eyed militiamen, it is not in doubt that the Britisher's trial and condemnation was inevitable, and technically valid. Possessed of incriminating documents and caught out of uniform in suspicious proximity to the American camp, in such circumstances only one verdict was possible. No one realized this more clearly than André himself; and when the day of execution came he went to his fate with the same unfaltering courage as had been shown by Washington's chief spy in British-occupied Long Island, Capt Nathan Hale; captured and executed in the September of 1776.

FEW MEN can have operated a more elaborate spy system than Napoleon Bonaparte. His agents swarmed everywhere, but particularly in Stockholm, Copenhagen and Danzig, whence the English sea-service obtained much of its tar, sail canvas and hemp cordage. They were equally busy about the mould-lofts and rope-walks attached to the Royal Dockyards at Chatham, Deptford, Plymouth and Woolwich—where they were not above practicing a little quiet sabotage when occasion offered—and in all the invasion camps scattered along the Channel seaboard. Nor were they confined to any one particular class or to a single sex. The alluring Countess Walewska not only bestowed her favors on Napoleon, but kept him remarkably well informed about the Russians' intentions, whether as enemies or somewhat dubious allies. In another direction the incredible Ali Bey al Abassi, who professed to be one of the last descendants of the sacred Caliphial family of the Abbasides, but was actually a Spanish Jew from Cadiz, in 1807 travelled all over Arabia, living in princely style, but

secretly preparing the way for the realization of Napoleon's dream of an overland conquest of India.

Nor was the Emperor the only one to operate an elaborate espionage net. The sly, wary Joseph Fouché, Napoleon's Chief of Police, manipulated a spy system even more elaborate and penetrating than the one controlled by the "little Corporal's" military cabinet. It even had a special branch whose sole work was to keep a watchful eye on the fevered politics and jockeying for place and power that characterized the army itself. Thus when the fiery, red-headed Marshal Ney took over the discarded mistress of Gen Moreau, he little thought that the charming Ida de St. Elms, whose company so delighted him, was on Fouché's pay-roll, and enormously valued for the detailed accuracy of the reports on army intrigue she forwarded to police headquarters with such unfailing regularity.



Yet faulty intelligence contributed very materially to the "little Corporal's" downfall at the crucial battle of Waterloo. With his troops deployed along the gentle slopes of Mont St. Jean, the failure of his local agents to warn him of the sunken road to Ozain, which ran right across his front, proved fatal. For to the Emperor's impetuous cavalry that sunken road was noth-

ing less than a yawning death-trap.

The Duke of Wellington had far less money to expend on his secret service than his great opponent; but this stultifying fact was more than offset by the skill with which the Britisher recruited his agents. Some spies volunteer for the work out of a sense of adventure; others in the hope—mostly illusory—of substantial reward. Others are forced to comply with the orders they are given through the threat of what may happen to their dependants should they fail to prove obedient. But the best and by far the least costly type of agent is the man, or woman, inspired by a sincere and lofty sense of patriotic duty.

It was upon agents in this last-named category that Wellington chiefly relied; and right nobly they served him throughout the whole of his campaign in Portugal and Spain. As a close friend of the Duke's recorded in after years: "He told me that there never was so perfect a system of espionage as the one he had in Spain; that all the *curés* were in his interest, and that the French never did or said a single thing he did not know, and that it was never suspected by the enemy."

THE WAR BETWEEN THE STATES, like all conflicts between antagonists of the same nationality, offered almost illimitable opportunities for espionage; in which women, as so often in American affairs, played a characteristically important part. The accomplished actress, Pauline Cushman, for example, found little difficulty in persuading the Confederate authorities that her sympathies were with the South, while actually working with rare skill and daring in the interests of the North. No less enterprising, if considerably less fortunate, were the two genuine Southern partisans, Mrs Augusta Morris and Mrs Rose O'Neal Greenhow. The former tried to ingratiate herself with the Northern Commander, General McClellan, by offering to betray the alleged code employed by the Confederate Army Signals. She demanded a payment of \$10,000 for the information. But unfortunately for her, as for Mrs Greenhow, Mrs Philip Phillips, the trousered, manly-looking Mrs McCarty, and many other sanguine but

inexperienced ladies, counter-espionage work in Washington was under the direction of "Major E. J. Allen." And E. J. Allen was the name which obscured the identity of the ex-barrel maker of Chicago, Allan Pinkerton; probably one of the most astute and experienced detective agents of all time. Perhaps the only two Southern agents to elude his vigilance were Molly Hayes and the Englishwoman, Elena Lowe. He certainly put an abrupt end to the meteoric career of the flashing Belle Boyd.

IN THE War between the States espionage, for both sides, was largely a matter of improvisation. It was a very different matter with the Germans when they finally succeeded in provoking their war with France in 1870. Steiber, the military intelligence chief under Moltke, controlled a corps of no less than 30,000 agents, many of whom were forced to share the perils and privations of a Paris under siege by their own compatriots. The same lavish use of agents characterized Steinhauer's preparations for the outbreak of war in 1914, when 8,000 spies were distributed about France and Belgium alone.

But even so early as the September of 1914 the German intelligence had exposed its fallibility. For it was the reports from unreliable agents behind the Allies' lines which persuaded Gen von Kluck to make preparations for retreat, when all that lay between him and Paris were the scattered, disorganized units of Lanrezac's demoralized Fifth Army.

So far as the war of 1939-45 was concerned, Hitler's whole regime having been based upon a system of espionage only a little less complicated and widespread than that operated by the Russians, embracing every form of activity, domestic and foreign, in peace and in war, it is impossible even to estimate the number of agents that the Fuehrer, in his hey-day, had at his beck and call. At one end of the scale there was the elaborate spy-ring operated in the Middle East by Dr Paul Levenkuhn, with headquarters in Istanbul; to whom agents reported from India, Egypt, Malaya, Burma and as far afield as Afghanistan. It was an enormous structure, only

paralleled by the organization set up in Japan on behalf of the Kremlin by Dr Richard Sorge. An agent of the Red Army 4th Bureau, Sorge went so guilefully to work that in the end he possessed the entire confidence of the German Ambassador in Tokyo, Gen Eugen Ott. Some notion of the scope and internationalism of his contacts may be seen reflected in the number and racial variety of Sorge's subordinates, which included the German, Max Klausen; the Yugoslav, Branko di Youkilitch and the Japanese, Hozumi Ozaki. At the other end of the scale, there was the ostensible leader of the Dutch Resistance, Christian ('King Kong') Lindemans. Admired as a war hero for years, his betrayal of the plans for the Arnhem "drop" to the German intelligence officer, Col Kiesewetter, foredoomed that ill-starred enterprise to costly failure even before it started.

But the palm for sheer nerve-racking duplicity in a good cause must surely go to LtCol Alexander P. Scotland, whose evidence at the trial of Field Marshal Kesselring revealed the amazing fact that for a considerable period he had served, undetected, on the German Staff, the better to furnish the British authorities with information regarding enemy troop movements and plans.

ESPIONAGE, by agents left or sent into hostile territory, forms the first, or positive side of this particular branch of politico-military activity; counterespionage its negative but little less important complement. Both avocations have their own particular hazards and demands.

It is, of course, the prime business of a counterespionage organization to checkmate the activities of the enemy agents planted in the homeland or infiltrated into occupied territory; and in due course to bring those responsible for them to book. Sometimes the round-up does not occur for months after the outer periphery of the concentric spy-ring has been penetrated. For minor agents permitted to pursue their activities apparently unchecked will often give a lead to the more important figures in the background; small fry allowed to splash around

freely will help to land the bigger fish. Like Grey's unheedful schoolboys, "regardless of their doom, the little creatures play," and in their skuttlings to and fro quite often, if quite inadvertently, betray much that otherwise would have remained hidden from the counterespionage organization which has kept them under unobtrusive observation, but refrained from apprehending them prematurely.

In the World War of 1939-45 the incidence of the aeroplane, wireless telegraphy and radar added tremendously to the work with which the respective counterespionage services — and particularly the German — found themselves confronted.

At the outset of the struggle the German counterespionage services were frankly baffled. It was only when they mastered the principles of radar sufficiently to enable them to operate interception stations and direction finding (D/F) mobile reconnaissance units, that the life of the agent dropped into German or German-occupied territory became perilous to an almost suicidal degree.

Information is always more valuable than elimination; and even more important than the arrest of the agent-operator was the capture of the transmitter as a going concern — together with all relevant documents — so that it could be played-back to the enemy intelligence as though their own man were still at the keyboard.

To bluff a rival intelligence that they were still in touch with their own operative required, first, that the code in use between them should have been thoroughly broken and decyphered — an easier task, for experts, than might readily be supposed. It is on record for example, that by the time of the German attack on Russia in the June of 1941 the Reich intelligence had succeeded in breaking all the codes of the respective belligerents — not to mention those of their ally, Italy! Only one or two employed between the United States and Great Britain were not broken.

A far more difficult matter than code decyphering was to manipulate the keys in a play-back in a manner indistinguishable from that usually



employed by the agent-operator. This indeed was a tricky undertaking. For all operators have an individual touch, quite personal to themselves, which, recorded on a steel tape or gramophone, is quite as self-revealing as handwriting. Indeed, the individual characteristics of transmission technique — speed of operating, pauses between groups and so on — can be detected by an experienced ear in much the same way as a highly-trained musician can differentiate between two pianists' respective renderings of the Beethoven Concerto No. 3, in C minor. Furthermore, agent-operators have their own private methods of self-identification, such as rendering every third stop as *stip*, or adding a group of apparently unrelated letters to the end of their messages, which are extremely difficult to identify with certainty.

Yet the advantages of a successful play-back are so tremendous that the risks involved in trying to hoodwink the enemy intelligence just have to be taken. For the stream of incoming messages not only form a clear guide to future enemy plans and intentions, but frequently reveal the existence and scope of other spy-rings, which the security forces have hitherto failed to identify and track down.

Sometimes, if the agent-operator is a native of the enemy-occupied territory in which he has been captured, threats of what may happen

to his nearest and dearest if he fails to comply, will induce him to continue handling the keys in his captors' interests. But if he remains stoutly obdurate, his place must be taken by someone possessed of a touch as closely resembling his own as possible. Sometimes the enemy intelligence is deliberately offered a substitute operator, ostensibly from the group to which the genuine operator is accredited; the excuse being that the original man is dangerously ill or has fallen into hostile hands.

Hopefully, therefore, the bluff goes forward; with the incoming messages eagerly scrutinized, and the enemy intelligence fed with what sound like authentic reports, but which are calculated ever so slightly, but vitally, to mislead him. Every now and then these phony reports are bolstered up with a piece of genuine information, of greater apparent than actual value, just by way of inspiring confidence.

There is always the risk, of course, that the play-back will have been recognized as a fake, and that the enemy intelligence will, in turn, have embarked upon a similar deception; playing back the play-back with equal resource and ingenuity.

In any case it is not a game that can be played indefinitely. But while it lasts it constitutes a battle of wits in which the winner is likely to be the man with the livelier imagination and the sounder training in as dark and sinister a side of warfare as can well be imagined. Indeed, if ever the true history of the intelligence side of the 1939-45 conflict comes to be fully written—a most unlikely event—the narrative will reveal many an example of the work of the shy, elusive, publicity-shunning counterespionage service—on both sides of the fence.

ESPIONAGE does not come to an end, of course, when the bugles sound the cease fire.

Obviously, no country can afford to remain without intelligence of the progress being made elsewhere in weapon development and new tactical doctrine. When the Italian Gen Douhet's tactical gambit known as the Blitzkrieg was first tried out on the ground by the German Panzer leader, Guderian, for example,

it was not long before agents' reports of the methods employed were on the intelligence files of the leading European countries. In later days a full review of the overwhelming success of the Blitzkrieg gambit in Poland was forwarded at once to Gen Gamelin; but it remained on his desk—unopened! No blame for the débâcle that followed can therefore be attached to the *Deuxième Bureau*'s agents. They had accomplished their task admirably; but with a Maginot-minded *État Major*, self-persuaded of the military impenetrability of the Ardennes, the shape of things to come was wilfully ignored.

The espionage service of the Third Reich was far flung and comprehensive, but in scope and elaboration it could not compete with the Russian. For the Russians are a semi-Oriental people, with that characteristic combination of mistrust and insatiable curiosity so vexatiously familiar to those who have lived in the East. Surrounded by native servants, as they find themselves, they are subjected to perpetual prying and chattering, until everyone—again through their servants—is acquainted with every detail of their private lives, down to the number of times a day they change their linen or brush their teeth. Temperamentally equipped on similar lines, as he is, spying is second nature to the Russian; so it is not surprising that the ramifications of his espionage system go so far as to include a super-secret service to keep check on the secret service!

Soviet espionage is, of course, as busy in the political field as in the military; as the unmasking by Gouzenko of the spy ring in Canada, the arrest of Alger Hiss and the Rosenbergs, the revelations of Victor Kravchenko, and the intelligence already gleaned by the Australian authorities from the MVD colonel, Vladimir Petrov, all bear eloquent witness. From these disclosures it is quite clear that the Soviet intelligence services are as coldly unscrupulous as they are completely ruthless. Blackmail and pressure based on some weakness or indiscretion, play as important a part in forcibly recruiting agents, as do subtle appeals to vanity or greed. It was be-

cause they were flattered into seeing themselves as among the leaders of an idealistic new world-order that such men as Klaus Fuchs, Allan Nunn May and Bruno Pontecorvo were willing to betray the trust reposed in them—and who knows how many more whose defection may yet be revealed.

Yet, assiduously as the MVD and their associates may range beyond the Iron Curtain, they are unable entirely to prevent others from penetrating behind it. The activities of the counter-revolutionary *Nationalni Troudrovoi Soouz* have given the men in the Kremlin something very serious about which to worry themselves. Indeed, the extent of their uneasiness may be gauged from the fact that they deliberately planned the assassination of the NTS leader, Georgi Okolovich; detailing Capt Nikolai Khokhlov to proceed into the Allied zone of occupation in Germany and there despatch their dangerous enemy by means of poisoned bullets fired from a dummy cigarette case. Undoubtedly, had Khokhlov not undergone a change of heart, the cold-blooded murder would have been carried through.

There can be two views about the ethics of espionage, but only one about the ethics of homicide. Yet it is against forces that regard murder as just one more weapon in the spy's armory that the intelligence services of the Western Powers wage unceasing, if subterranean, warfare. It is a conflict fought out by men of steady nerve and unwavering courage who, at the hazard of liberty and life, seek to preserve the freedoms that others have conspired to betray. Such men as these, lonely, deliberately shorn of all domestic ties, working without the stimulus of comradeship, and well knowing that should they fumble and slip they can look for no sort of official aid—such men as these must command our unstinted admiration and our profound respect. For "true courage is to do without witness everything that one is capable of doing before all the world." That is the sort of courage displayed by those who "hie them forth to spy out the land and report faithfully of those things they have witnessed."

US MC

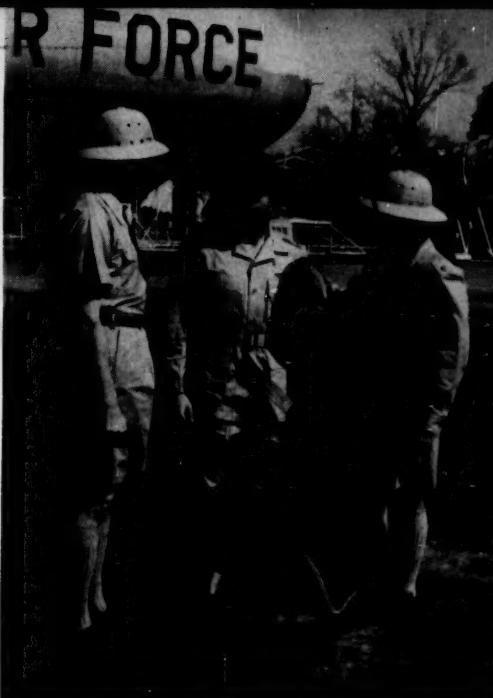
in brief

Look for the MCI to come out with new accounting courses in the near future. Special attention will be given the new fiscal accounting field which is to be supplemented by a course in budgeting. The courses are now being prepared by 6 Reserve officers called back for the special assignment. Five of the officers are college professors in private life. The sixth is an FBI agent on leave from the Bureau's special tax accounting section. Details of the fiscal accounting system and the new responsibilities accruing to COs through its implementation will be covered in understandable language in an article titled "Opn Fiscal," scheduled for the October issue of the MARINE CORPS GAZETTE.

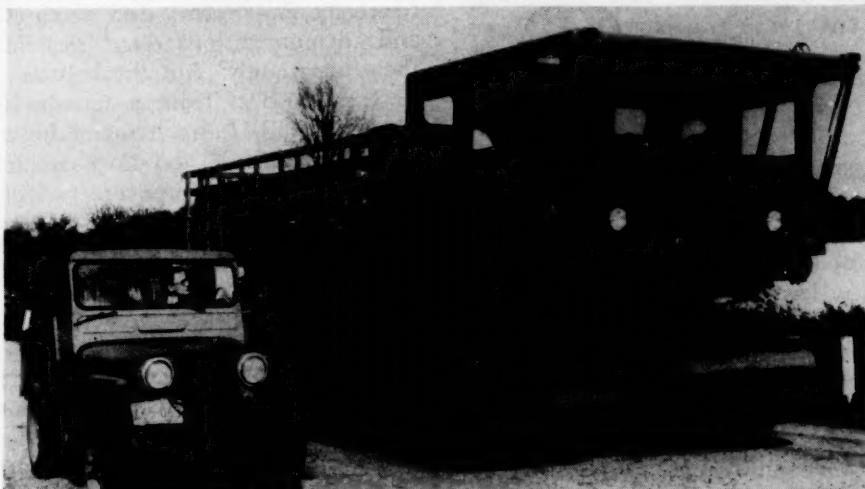
The prototype of a small, specially designed jet fighter is reported under construction in Switzerland. The pint-sized plane is required by the Swiss because of the peculiarities of Alpine air fields. Many are tucked away into high valleys surrounded by mountains and the hangars, often built into the mountainside, are small. The new aircraft is a single engine, swept-wing fighter designed for close support.

Fairchild Aircraft will build a new, light jet transport with a cruising speed of 560 mph. Designated M-225, it will carry a crew of 2 and 7 passengers.

Dubbed the "Teracruzer" by its makers, the new experimental cargo and personnel carrier (below) rides on 8 tire bags specially developed by Goodyear. The "Rolligon" tires are 3½ ft in diameter and 5 ft long. They carry 3 to 5 pounds of pressure and absorb shock by conforming to surface irregularities.



The new summer service uniform (above) will be made available to Air Force personnel this fall. The new silver-tan items of apparel include a long-sleeved bush jacket, both long and short trousers, a short sleeved shirt and knee-length stockings. Wearing of the new uniform will be mandatory after 1 July, 1959. (See "Sensible Summer Uniforms," p. 46.)



Soviet aircraft have been assigned new designations by the US to simplify identification and reporting. The new names parallel the system used during WWII to report Japanese planes. Some of the official terms applied to Russian planes follow:

FIGHTERS

Frank	Yak-9
Feather	Yak-17
Flora	Yak-23
Fin	La-7
Fritz	La-9
Fang	La-11
Fargo	Mig-9
Fagot	Mig-15

BOMBERS

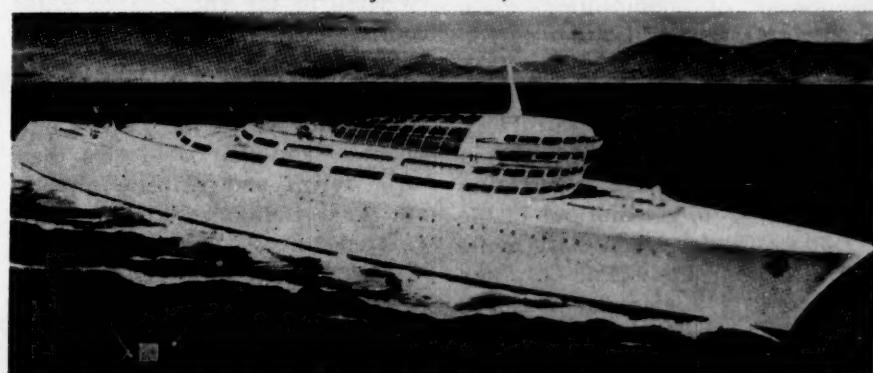
Bull	Tu-4
Beagle	Il-28
Bison	Type 37
Badger	Type 39

Nine, 19-foot plastic boats designed to be used for the rescue of airmen down in shallow water or swamp land have been ordered by the Navy. They will be of the flat-bottom, blunt-nosed glider type powered with aircraft engines and driven by propellers. The midsection will be equipped with stretchers to accommodate the injured.

Complete details on the first annual program to effect appointments to limited duty officer and warrant officer ranks under the new career enlisted promotion policy can be found in Marine Corps Memorandum 54-55.

Four top aircraft companies in the US will begin special design studies for a new high performance observation reconnaissance plane for the Marine Corps and the Army.

The nuclear-powered "Ship of the Future" (below) was conceived by Bethlehem Steel engineers. The 600-foot passenger-cargo ship can be a reality but practical and economical problems are yet to be solved.



DON'T KILL 'EM WITH KINDNESS

In combat you have your life on the line every minute of the day
and night—the trained, tough Marine is the one who lives longest

“STARVE ME, RUN ME, SHOOT ME, but don't bore me!” So said SSgt Fortner in his prize winning essay, *The Little Picture*. “But if we're to succeed in getting some spirit into new young soldiers, the Congressmen and mothers have got to realize that in combat you have your life on the line every minute of the day and night and the trained, tough soldier is the one who lives the longest.” So said Mr A. E. Hotchner, civilian, in an article in a leading men's magazine entitled “The New Army: More Sweat — Less Blood.”

Both of the foregoing, in my opinion, are excellent articles along the lines we've really got to start pushing. What we need now, and we'll need it even more with the mobility demanded by warfare of the future, is a swing back to the *physical!*

We must have a certain amount of lectures and field manual work, but the most important thing now is some good, solid physical conditioning and more field work!

There is only one way to train a fighting man and that is to let him fight! No, I don't mean that we'll give a group of Marines a few bandoleers of ammunition each, choose up sides and let the “aggressors” take on the “aggressives,” although this might give the corpsmen a chance to perfect their talents.

I do mean, that the best way to get a Marine in shape for fighting the enemy, is to get him out in the boondocks and let him start living the life of a fighter. The only way in the world a man can learn to shoot straight is to practice actual shooting. In order to get used to

lugging an M-1, a BAR or an LMG, he should carry them until they seem to become lighter day by day. Also, if we want him to become relatively immune to the noise, confusion and terror of war, then we must make that training realistic. We must bring back the obstacle course with real obstacles in it, and aid it with overhead MG fire handled by an expert. Perhaps we can abet our field problems with overhead mortar fire on field training ranges. In addition, when we have night work, how about a little “H&I” fires in the near vicinity, or at least a good, loud night-noise record with the latest in artillery blasts, bugles and screams to keep 'em awake and scared—until they get used to it! Yes sir, that sounds pretty logical to you combat veterans, doesn't it, but how about the newcomers to the Corps the boot Marines charging through PI and Diego, the boot officers going through Quantico, and the non-vets now in the FMF? Wouldn't it be a little easier for all concerned if we could “break in” these young men a little differently, a little more realistically than we were trained? Wouldn't it be nice if we could help them become acclimated to the chow, sacks, noise, confusion and fear of combat even before they leave the States in the next go-round, if there is to be one?

How can we do it? There's only one way and that is to give them some rough and realistic physical and field training. Actually, what difference does it make if the new-

comer, be he officer or enlisted, knows that the M-1 and BAR weigh 10 lbs and 21 lbs, when loaded? Why not let him carry them for a while? He'll learn the hard, but the realistic way!

Nomenclature and functioning are relatively important, and lectures and demonstrations can explain them adequately. But the best way to learn a butt from a muzzle is Physical Drill Under Arms. Fifteen minutes of this per day for a couple of weeks, and the newcomers will find out what the rest of us did in our youth: that the 10-pound M-1 only weighs 5 pounds—after you get used to it!

Those terrific legs that these young Marines bring to the Recruit Depots and Basic School; they were great on the basketball court or the dance floor. But will they hold up in a 10-mile soft-shoe dance into combat? Let's find out, not then, but now—with daily, or at least twice weekly, hikes. If we don't have the time or space for a long hike, then let's trot a couple of miles, or use the old training standby: “Run 100, walk 100 (yards).”

Since we want fighters who can push themselves up quickly from the deck, zigzag rapidly to a little cover, and resume firing, why can't we bring in a well-balanced calisthenics course? “Push-ups” develop the arms and chest muscles used in pushing up; dashes, or relay races, or “running in place” will develop that quick burst of speed for rapid movement under fire; and the best practice for “hitting the deck”—why, hitting the deck, of course!

Why don't we practice these

By Capt W. J. Davis

things? And not just in the FMF, on the rifle company level, but in the MBs, the MDs afloat and all other duty stations. As we learned in the early days of the Korean War, these are the men who really have to work at keeping in shape for moving out rapidly!

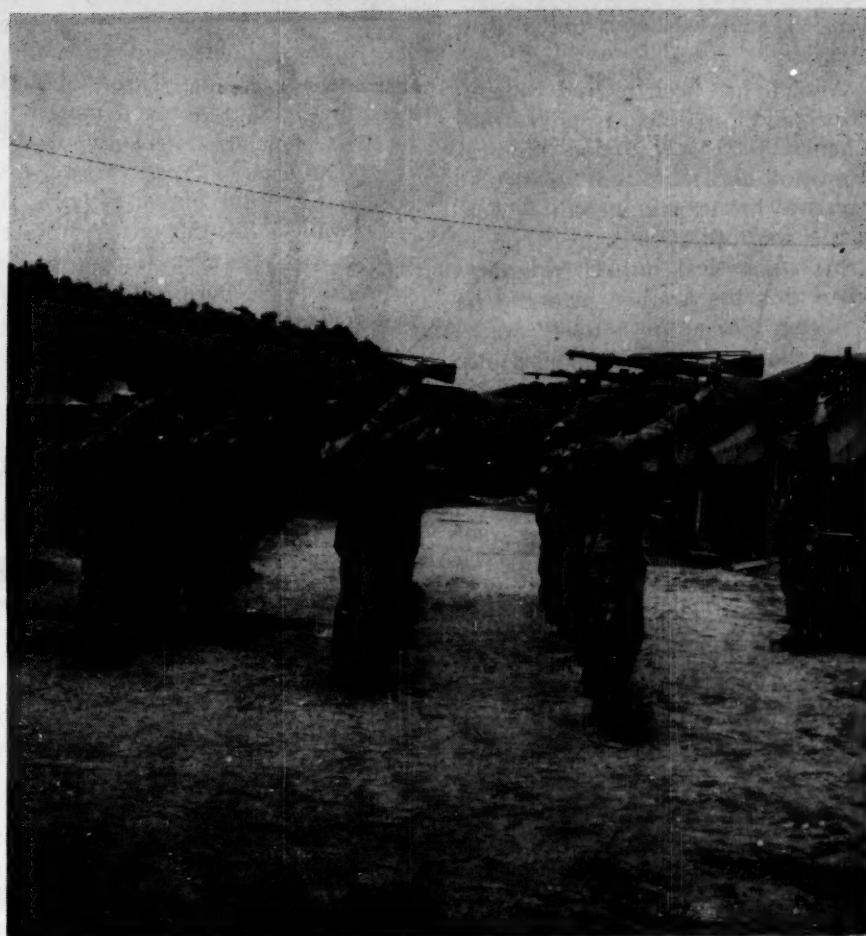
Thus, all of the foregoing leads us to one primary question: how is the Marine Corps improving the physical fitness of its officers and men for the next series of amphibious operations?

Before you come up with a haphazard answer, think it over from the standpoint of physical fitness. For example, let us look at Korea. After the street-fighting in Seoul, the hill-fighting up to Uijongbu and again the winter-fighting from Chin-hung-ni up the Pass to the Chosen Reservoir, we stepped-up our training at the major bases, especially Pendleton, in all 3 phases.

First, we constructed newer and better "towns" for combat problems; then we used the hills of Pendleton to toughen Marines' legs before Replacement Drafts shoved-off for the hills of Korea; and finally, for the latest in cold weather techniques, we sent them through the rugged course at Pickel Meadows.

Such realistic training is very fine, but more realistic still, we must remember that our fighting men must be in superb physical condition. And how can we guarantee that any Marine stationed anywhere in the Corps will be in top condition at all times? Basically, I believe, by a standard physical fitness training program in consonance with a standard physical fitness test to be given at least once a month throughout the Corps.

We all realize that Americans are well-known for their manner of doing everything they can the "easy way." Doctors keep us a relatively healthy nation, but our young men were anything but "physically fit" at the time of Pearl Harbor. Roughly 30 per cent of our youth were placed in the "4-F" category. If anything, this condition is getting steadily worse. Also, we found that the older men, those who had the mental qualifications and experience necessary to become good officers and NCOs, were among the most deficient. Luckily, we had a little



time to get the remaining "civilian soldiers" in good enough shape so that they finally conquered an enemy who was smaller in stature, but who was physically more than our equal at the beginning of the war. In addition, there are those who claim that the enemy was still physically superior, man for man, at the end.

Ironically, the picture did not change with the onset of the Korean fracas. And why do our enemies always seem to be in better physical shape than we? Mainly because they have to work hard for a living, like their fathers before them and thus their bodies were hardened to the rigors of war even before that war came. It seems quite apparent that any future enemy also may be well conditioned both individually and collectively. Why, then do we permit ourselves to grow soft from administrative work, "classroom fighting," the eternal guard, police and mess duties, with only an occasional stroll in the boondocks for a conditioner.

I remember how MajGen E. W. Snedeker former Director of the

Basic School, told my class in 1947 as we started our most important course, Leadership: "You officers must always strive to do everything better than your men do it. You must walk more erect, march longer, shoot straighter and be a better Marine than any man in your outfit. Then, and only then, will you be able to command their fullest respect."

How true the General's statements have remained through the years! And only when the officers and NCOs of the Corps go all out in an effort to be in the best possible physical condition at all times will the Marines under them do their best in the same category. Perhaps the unit Special Services Officer can get the lower rated men to play a few games of touch football now and then, but these men can hardly be expected to try their hardest when they see their officers and NCOs shove off on liberty every afternoon just as their physical fitness program gets underway. If the leaders, both officer and enlisted, of the Corps are in top notch shape, the more the

enlisted men will seek to emulate them.

Also, it has been proved by educators and physiologists alike, that when a man is in good physical condition and takes part in regular exercise, his mental health is definitely improved.

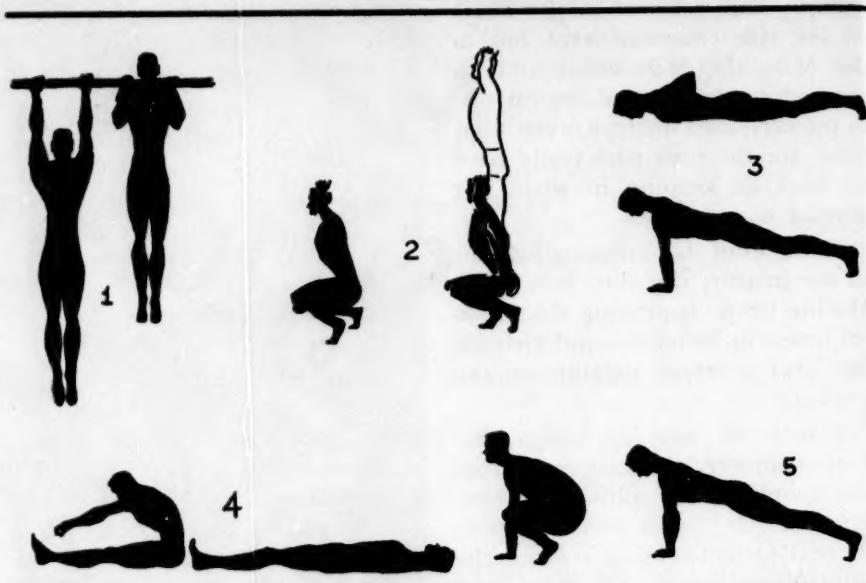
Most physical fitness programs stress that the average man can be well-conditioned in 8 to 12 weeks of one hour-per-working day periods. The best time for this program would be a one-hour afternoon period Monday through Friday and could be easily started at most Marine Corps training bases.

As for the problem of what exercises should be contained in the program, the panacea of all our physical ills could very well be a little-used, but highly informative manual known as FM 21-20, *Physical Training*. Step-by-step, it lays out, for commands of all sizes, complete courses commencing with conditioning exercises, rifle exercises, log exercises, guerrilla exercises, grass drills, obstacle and confidence courses.

Perhaps the best portion of the entire manual is that which deals with what the Corps needs most in a purely physical way. We must have a standardized physical fitness test of some easy-to-administer type which would be given to all Marines.

While there are 2 separate tests available, designed for both indoors and outdoors, 80 percent of each are the same: (1) Pullups; (2) Squat jumps; (3) Pushups; (4) Situps—each during a 2-minute period. While the fifth part of the test can be timed 300-yard run, for the proposed outdoor phase, I think it would be better for all-Corps use if we standardized (5) to 60-second squat thrusts.

How to administer the test, the number of testing personnel for a 300-man command, or various increments thereof and other related data, are all listed. And for cost-conscious COs and junior officers, one of their first thoughts will be: how much equipment will my command need? Once again, the book answers that "there should be room for at least 6 men to pullup for each 100 men tested at one time." Thus if you have a 50-man detachment, all you need is enough pipe for 3 men to chin themselves at the same time.



If you can break the command into 2 increments, the cost would be almost non-existent. The book also states that "smooth wooden bars are satisfactory."

That chinning bar and few pencils plus mimeographed score cards copied from the book are all that are really necessary for this test. Thus, any Marine can see that here we have a solid system for Corps-wide testing and improving of our overall physical fitness, be we officers, or enlisted.

By giving this test to each man as he reports aboard, then regularly every month thereafter, and finally just before he is transferred (which, is the way the US Navy did it all throughout WWII) we would get an excellent indication of how much a Marine improved while serving at a given activity. By compiling the average monthly grade of all hands, we could, for example, compare the MD, USS *Wisconsin*, with the MB, NSD, Clearfield, Utah, and see just which CO was keeping his men up to requisite Marine Corps standards. In addition, when the Inspector General's teams make their annual inspections, they would have a concrete means of testing each command's physical prowess.

The thing that I especially like about this overall Corps idea is that it makes all forms of physical exertion a little bit easier if the "old Man" and the senior NCOs will be tested right along with the junior officers and the new Marines. I can



foresee, after a period of adjustment, situations like the MB, NSD, Clearfield, Utah, trying to beat out the nearby MB, NAD, Pocatello, Idaho, and the best overall station results being carried in the HQMC *Monthly Information Bulletin* for a little intra-Corps competition.

Over a relatively short period, we could get our Special Services Officers' and Commanding Officers' reports of these tests to indicate just what type of Marine needed what type of physical exercise the most. For example, I found that the majority of the college-trained 2dLts in my Basic School company had fairly strong legs, gained from our "running-type" sports in most colleges, yet less than 5 per cent of them

could climb the obstacle course rope without using their legs for assistance. Thus, we can see that they definitely need much more work for their arms. And since most colleges demand compulsory physical education courses for the first two years, these gentlemen should be in the best physical condition of any newcomers joining the Corps. From there the statisticians could show us the way to turn out the most physically perfect group in the world. As far as I'm concerned, we should be nothing less than the best! After all, we are Marines!

It should be quite easy for the reader to see why the use of these various physical training exercises will aid and improve our "am-

phibious athletes." The gradual increase of repetitions develops the muscles slowly and surely without the sudden strain that the average Marine undergoes when he must lift up 2 heavy boxes of MG ammo, or to carry a 60mm mortar a goodly distance, or aid in the rapid moving of an 81mm mortar baseplate, or any of the countless, day-by-day demands that combat constantly makes on all Marines.

One of the country's most outstanding military historians, S.L.A. Marshall, in his articles on "Battle Command in Future War," says: "The great advantage of the gain in moral force through all forms of physical training is that it is an unconscious gain. Will power, determination, mental poise and muscle control all march hand-in-hand with the general health and well-being of the man. Fatigue will beat men down as quickly as any other condition, for fatigue brings fear with it. There is no quicker way to lose a battle than to lose it on the road for lack of adequate preliminary hardening in troops. Such a condition cannot be redeemed by the resolve of a commander who insists on driving troops an extra mile beyond their general level of physical endurance. . .

"Truly then, it is killing men with kindness not to insist upon physical standards during training which will give them a maximum fitness for the extraordinary stress of campaigning in war. As the body is

hardened, so must the mind be steadily informed, so that the soldier will take a reasoning view not only of the privations of the field, but of that which is being attempted."

General George S. Patton stated in a Letter of Instruction to his Third Army commanders in April 1944: "More emphasis will be placed on the hardening of men and officers. All officers and soldiers should be able to run a mile with combat pack in 10 minutes and march 8 miles in 2 hours. When soldiers are in actual contact with the enemy, it is almost impossible to maintain physical condition, but if the physical condition is high before they gain contact, it will not fall off sufficiently during contact to be detrimental." On another occasion, he said, "If you do not enforce discipline, you are a potential murderer. . . Fatigue makes cowards of us all. Men in condition do not tire. High physical condition is vital to victory!"

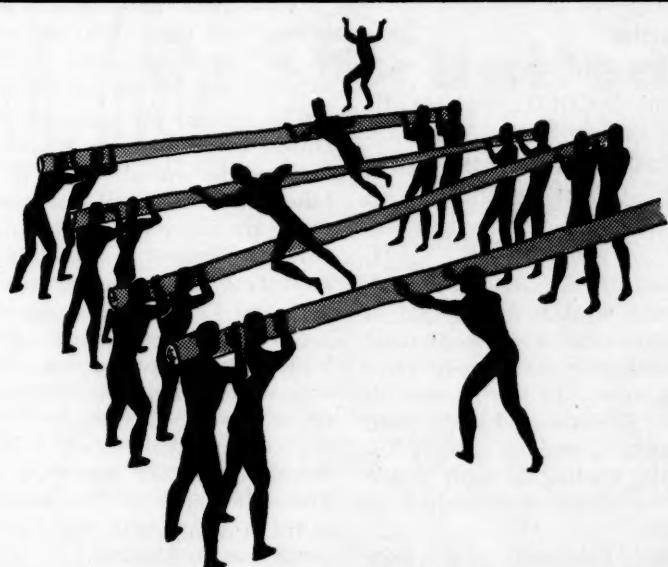
The best way to build any man's morale is to make him feel he is improving. One of the greatest formulae in this world is, "Every day in every way, I'm getting better and better!" With this thought in mind, every man feels at peace with the world. This physical fitness program for Marines can do this for those who follow it.

Thus, we've seen the problem: we have got to step up our training of Marine newcomers, both officer and enlisted, in 2 basic departments: physical conditioning and field work!

The proposed solution?—a well-balanced daily hour of physical conditioning, coupled with a Corps-wide monthly standard test of physical fitness, plus as many hours in rigorous, realistic field training as the local commanding officer can allow.

The overall outcome?—something that others might claim we can't do, but we will give our newer fighting men more improved conditioned reflexes for various combat conditions before they even get into combat!

What does all this add up to? To this, fellow Marines—when the next one comes along, their mothers, fathers and Congressmen, no one, will ever be able to say that *we killed 'em with kindness!* USMC



passing in review

Military Psychology . . .

THE POWER OF PERSONALITY IN WAR—MajGen Baron Hugo von Freytag - Loringhoven, 167 pages, sketch maps. Harrisburg, Pa. Military Service Publishing Co. \$3.00

This book has two main subdivisions. The first subdivision deals with war generally as it affects the individual, the army and the leader. The chapter headings covering this area are illustrative of this point: "War is the Domain of Danger;" "The Domain of Physical Exertion and Suffering;" "The Domain of Friction;" "The Domain of Uncertainty."

The second subdivision deals with the leader and the qualities which are necessary in the making of a great captain. Here we find chapters dealing with the need for imagination in a leader, ambition as an essential quality of a leader, a strong mind required to resist the impressions of war and a chapter entitled, "Without Strength of Character, No One Can Be a Leader in War."

The author, MajGen Freytag-Loringhoven, illustrates the work of Clausewitz with examples appropriate to his day and age. He concludes his treatise with a discussion of the Clausewitz terms "military virtues" and "esprit de corps." In this final chapter called "The Essence of Military Personality," his words have remarkable significance today, although written in 1911.

To illustrate how sound I found this book to be, here are two statements of many of equal merit taken from the text:

"... But it should not be overlooked that in future wars, units must move as rapidly as possible. Hence orders must be transmitted accurately with great speed. Improvements in transmitting methods must be continuous. Without improvements in this field, it would soon be impossible to handle armies as a unit. . . . These instruments will occasionally fail, as is the case with other modern means of communications, and subordinates will always be called upon to exercise initiative and responsibility.

"... Without a doubt our tactics must change with battlefield innovations. Napoleon said, 'tactics should change every 10 years to maintain even a semblance of superiority. We must not try [also] to reduce tactics to mere mathematical

and technical formulas. This they can never become; and because they cannot is precisely why our profession is so fascinating. War always has and always will require the best thinking and the most consummate personality development a person is capable of."

This replete volume will provide the modern military student with an insight to military psychology. It is a book to be read and reread, in company with Clausewitz, *On War*.

The author was born in Copenhagen, Denmark, in 1855. He served for a few years in the Russian Army and in the German Army (Prussian Guards) from 1878 until his death. He is considered one of Germany's foremost military writers. He wrote 15 books on various subjects, numerous pamphlets for German Army use, and was a steady and widely read contributor to the German Army's quarterly military review.

During World War I, Gen Loringhoven served first as Deputy Chief of Staff of the German Army General Staff's Field Echelon and was responsible for the administration of occupied territories. When von Moltke died in 1916, he succeeded him as Chief of the Army General Staff's Rear Echelon.

His book was written in German and translated into very readable English by the Historical Section, Army War College, under the direction of BrigGen Oliver L. Spaulding.

Reviewed by Col H. Nickerson, Jr.

Decisive Battles . . .

THE MILITARY HISTORY OF THE WESTERN WORLD. Volume II: From the Defeat of the Spanish Armada, 1588, to the Battle of Waterloo, 1815—Major General J. F. C. Fuller. 561 pages, 32 maps and diagrams. Funk and Wagnalls. \$6.00

Most assuredly one of the world's most profound thinkers in the field of military history and strategy, General Fuller is fortunately also a most lucid and prolific writer. In fact he and his contemporary Englishman, Liddell Hart, share the honor of making military history fascinating reading for many people for whom the subject previously held little interest.

This book is Volume II of a trilogy on the history of warfare in the West-

ern World, his most ambitious work to date. Volume I was reviewed previously in the GAZETTE. This second volume covers 227 eventful years by detailing the rise and fall of military powers and great captains. The author utilizes the device of a short chronicle to outline briefly the history of a nation or an empire leading up to the events which he portrays in detail in the chapters that follow each chronicle. He thereby sets the stage. This is a considerable help to those who may lack historical perspective to go along with an acquaintance with the great battles that decided the course of world history. In this respect, the title for this series that is being used on the British printing is probably the most indicative. It is called, *Decisive Battles of the Western World*.

Fuller combines some keen character analysis with his finely detailed descriptions of battles and campaigns. Thereby, the reader is treated to a most interesting study of the Queen who "hated war for its expense and yet launched an empire that was to endure for 300 years." Again, we read of a Swedish king who, when he died at the age of 36 had become "the most extraordinary soldier in the history of war." The disastrous culmination of his 20-year career of fighting was the battle of Poltava whose loss gave Russia a foothold in Europe—described by the author as "one of the most portentous events in the modern history of the Western World." Peter the Great, "a super-brute who ruled a nation of brutes," did not fail to take advantage of his opportunity and the Western World is still feeling the effects.

The author, by a careful choice of critical battles and key leaders, is able to show the over-all effects of military history for the general reader while picturing the individual battles in such detail as to interest the military student. From Frederick's great victories at Rossbach and Leuthen he shows the emergence of a spirit of German nationalism. When England pulled out of the alliance with Frederick in 1762 she reaped the whirlwind 13 years later when no ally would come to her aid to help quell the revolt of the American colonies. This culminated in 1778, when France signed a treaty with the US and declared war on England.

General Fuller portrays an interesting

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				Year	State		

Is the automobile customarily used in the occupational duties of any person except in going to and from the principal place of occupation? _____

How many operators under age 25? _____ Age of each: _____

Is the automobile customarily used in driving to or from work? _____

Relationship to owner: _____

If the automobile is customarily used in driving to or from work, how many road miles is the car driven one way? _____

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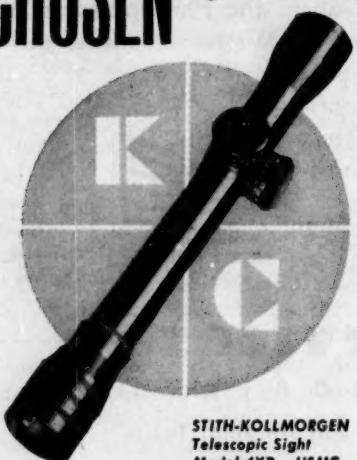
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picture of the American Revolution and the way that struggle ended the Age of Reformation and nourished the seeds of the French Revolution.

As a tactical dividing line for this book the author selects the Cannonade of Valmy (1792). Before that date campaigns were generally "methodical, leisurely and punctuated by an accepted etiquette." After that time unlimited warfare became the order of the day. Marshal Foch castigated these wars of limited ends and later proved his lack of understanding of the principles involved with the deadly stalemate of World War I.

Throughout, Fuller demonstrates the value of sea power. England was quick to capitalize on it. Washington saw its necessity. The naval defeat at Trafalgar shattered Napoleon's dream of invading England and made England the Empire of the Oceans for a century to follow. As Fuller says, "Without Trafalgar there could have been no Peninsular War, and without the Peninsular War it is hard to believe that there would ever have been a Waterloo."

In concluding this volume the author has an excellent study of the genius of Napoleon to whom he attributes "the warrior spirit of Alexander the Great and the administrative abilities of Augustus. Napoleon's efforts to enforce a Continental system on all of Europe to bring England to her knees fell short of realization in spite of his great military strategy. He was unable to find commanders capable of translating that strategy on the battlefield and finally paid the price at Waterloo, though no opponent ever considered himself closer to defeat than did Wellington on that occasion when he remarked, 'I have never fought such a battle and I trust I shall never fight another. In all my life I have not experienced such anxiety, for I must confess I have never been so close to defeat.'

Like so many books on military history this one could be improved by a more liberal use of maps.

Reviewed by LtCol H. W. Edwards

Small-Unit Textbook . . .

RIFLE SQUAD AND PLATOON IN DEFENSE—Maj Frank F. Rathbun, Infantry. 101 Pages. Illustrated. Military Services Publishing Company, Harrisburg, Pa. \$2.00

There can be no denying the statement that, "It's all in the book." Every item of military information required for tactics, logistics, ship-to-shore movement, signal matters and a host of other subjects may be found within the covers of recent FMs, TMs, LFM and various service periodicals—provided, one is fortunate enough to possess or have ac-

cess to these manuals—and secondly, if he has the time to cull through them all and dig out the information which he desires. Over the years many of us have done this so often that we now have the manuals memorized, or partially so. This, again, may be good for the soul, if time is available to pursue such a course. Among our junior leaders, both commissioned and noncommissioned officers, there is neither time in grade or time in the service to stand them in good stead, experience-wise. Often their attempts at "culling" from the present field manuals sometimes leaves a great deal to be desired when the end result is put out as instruction to the troops. Present field manuals do contain information, but they are put together in such a manner that even the most experienced officer or NCO is hard-put to say that they are interesting or to be more specific, readable.

Rifle Squad and Platoon in Defense is an attempt, and a very successful one indeed, to make the material found in our manuals both interesting and readable, without giving up in any way, the knowledge which is contained in those manuals.

The author, in his preface, states with no reservations, that his information is taken from FM 7-10 and presented in a simplified manner. Nearly every page of this book contains a sketch or diagram illustrating that phase of defensive action or planning which is being discussed within the text of that page. Schematic and panoramic sketches depicting such things as frontages, depths, sectors of fire, barrier plans, final protective lines and camouflage are coupled with written principles. These provide a graphic and mental image of principles of defense at squad and platoon level, and the proper application of these principles. In addition, Maj Rathbun has presented check lists for both squad and platoon leaders to utilize in the planning for, and actual conduct of, the defense of the unit sector. Included also are sample squad and platoon defense orders, a short appendix on terrain analysis and a glossary of military terms common to the defense.

Rifle Squad and Platoon in Defense is easily read, is interesting, has a good degree of continuity and contains all the information necessary for the successful accomplishment of the defensive mission of the squad or platoon. It is also an excellent textbook and ready reference for use in instruction. The information it contains is worth much more than the 200 pennies that it cost. This book is recommended highly to all junior leaders who want themselves and their unit fully "read into the picture."

Reviewed by Maj G. P. Averill



Military Combat Team Maneuvers

20 TOUGH GUYS IN A HURRY

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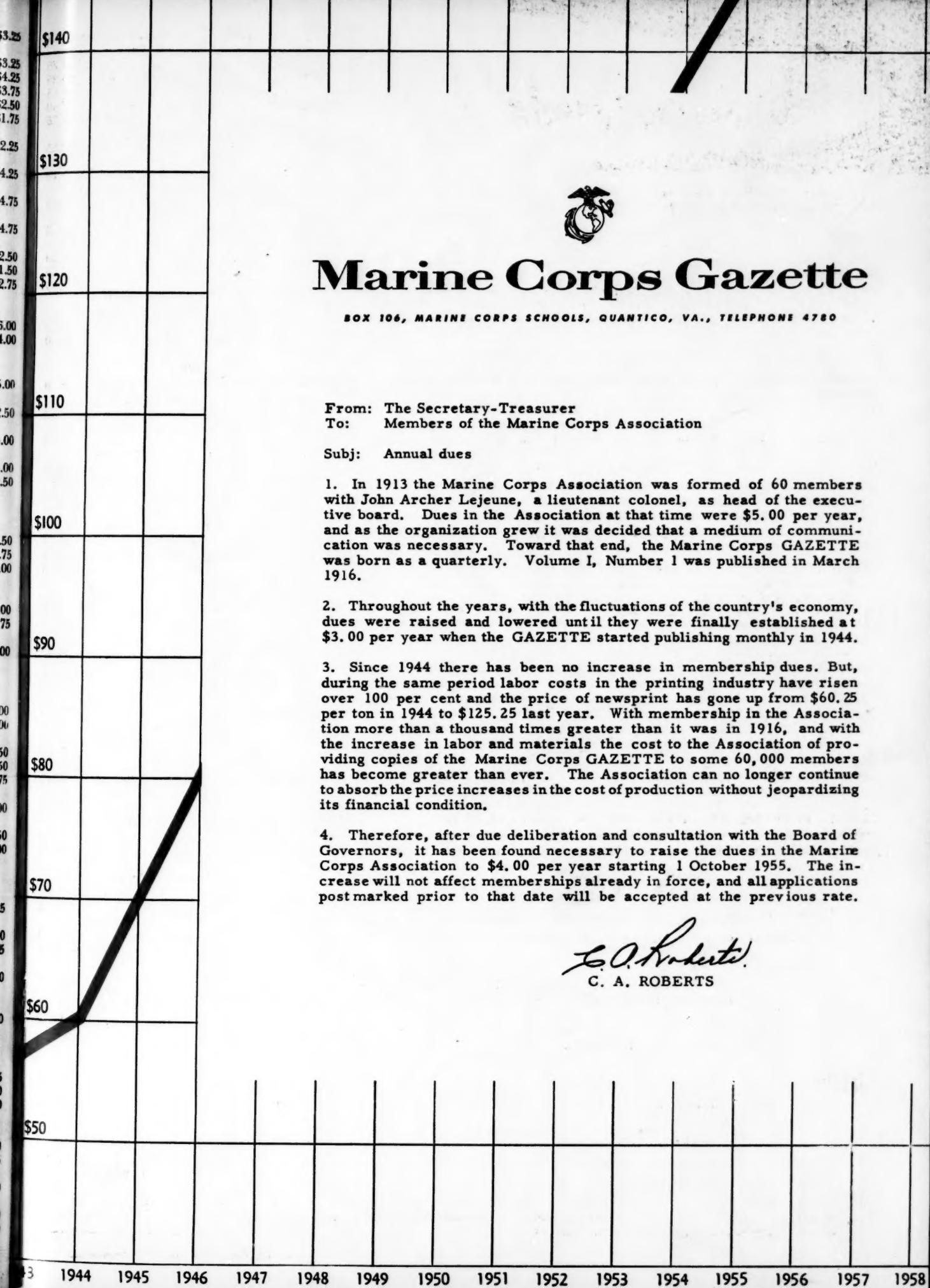
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BOX 106, MARINE CORPS SCHOOLS, QUANTICO, VA., TELEPHONE 4780

From: The Secretary-Treasurer
To: Members of the Marine Corps Association

Subj: Annual dues

1. In 1913 the Marine Corps Association was formed of 60 members with John Archer Lejeune, a lieutenant colonel, as head of the executive board. Dues in the Association at that time were \$5.00 per year, and as the organization grew it was decided that a medium of communication was necessary. Toward that end, the Marine Corps GAZETTE was born as a quarterly. Volume I, Number 1 was published in March 1916.

2. Throughout the years, with the fluctuations of the country's economy, dues were raised and lowered until they were finally established at \$3.00 per year when the GAZETTE started publishing monthly in 1944.

3. Since 1944 there has been no increase in membership dues. But, during the same period labor costs in the printing industry have risen over 100 per cent and the price of newsprint has gone up from \$60.25 per ton in 1944 to \$125.25 last year. With membership in the Association more than a thousand times greater than it was in 1916, and with the increase in labor and materials the cost to the Association of providing copies of the Marine Corps GAZETTE to some 60,000 members has become greater than ever. The Association can no longer continue to absorb the price increases in the cost of production without jeopardizing its financial condition.

4. Therefore, after due deliberation and consultation with the Board of Governors, it has been found necessary to raise the dues in the Marine Corps Association to \$4.00 per year starting 1 October 1955. The increase will not affect memberships already in force, and all applications postmarked prior to that date will be accepted at the previous rate.

C. A. Roberts
C. A. ROBERTS

